FOUNDED IN 1856

RAILWAY AGE

JUNE 11, 1949

McCARTNEY GENEVA LIBRARY

BASIS FOR LEADERSHIP

Leadership rests upon the ability to foresee, to develop, and to achieve — first.

On that critical basis, weigh the position of the General Motors Diesel locomotive.

It was pioneered by General Motors in 1934 and powered the first modern, high-speed, Diesel-driven passenger train — the famous Burlington Zephyr.

It has been continuously developed into the magnificent piece of motive power today preferred by railroads of America for the fastest, hardest jobs in both passenger and freight service.

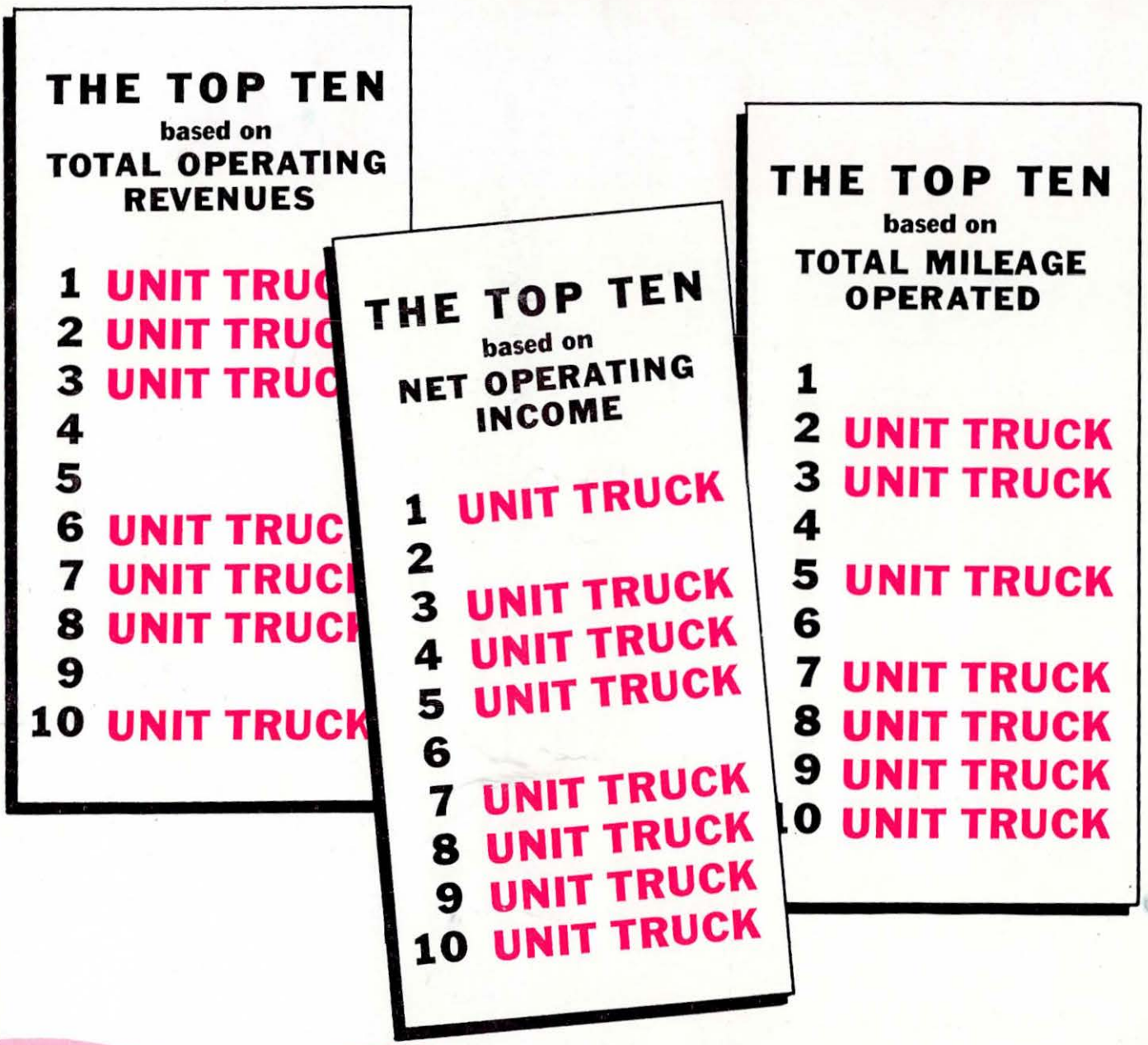
Its achievements — covering more than a billion unit miles in the nation's severest service — are known to every railroad man.

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS LA GRANGE, ILL.
Home of the Diesel Locomotive

GENERAL MOTORS LOCOMOTIVES

General Motors Diesel locomotives totaling more than 7,700,000 horsepower, are now in service on American railroads.

WHAT'S THE SCORE?

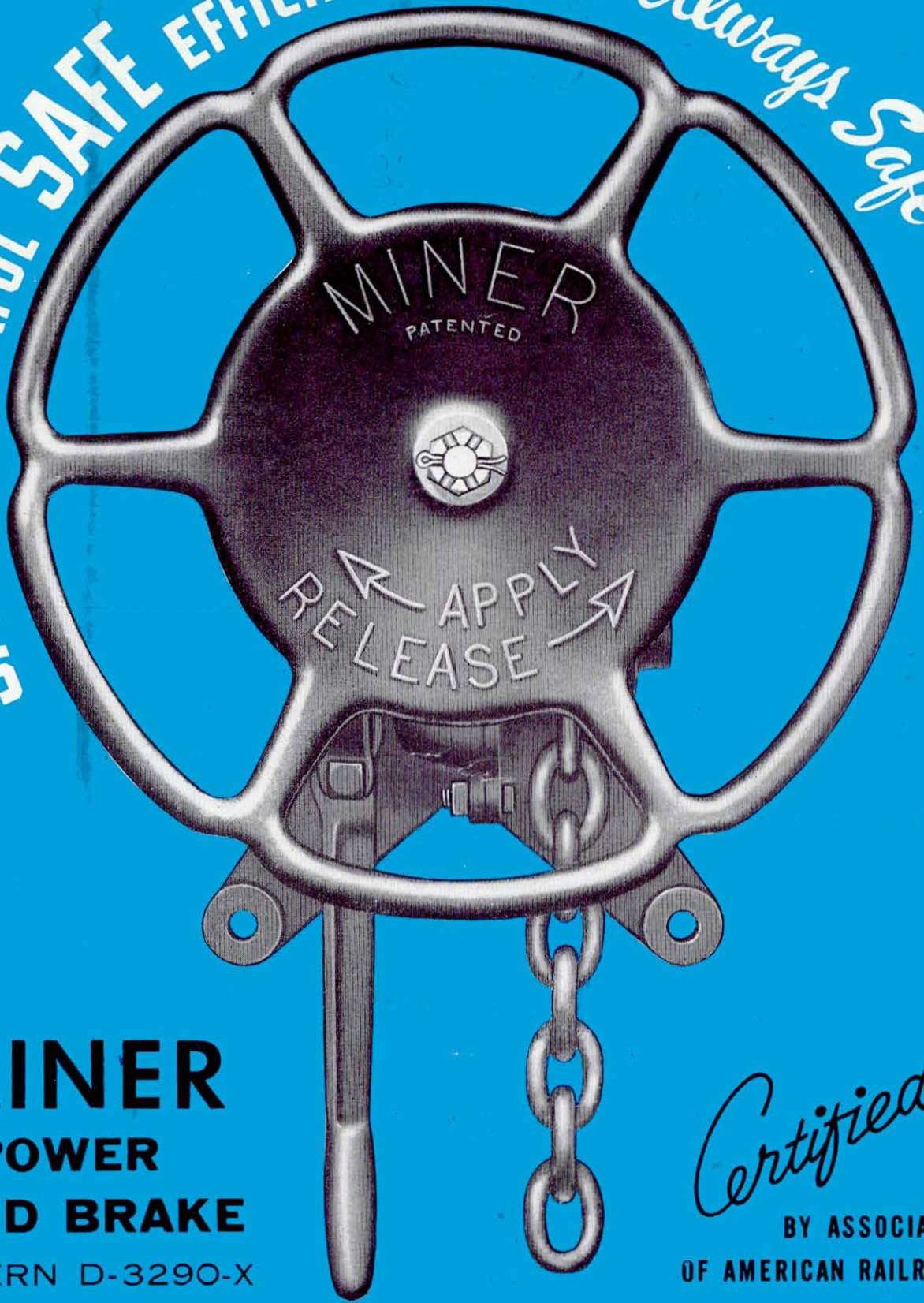


By any of the usual standards for measuring the relative size of U. S. railroads* we find UNIT TRUCK specified by the majority of the TOP TEN . . . . To-day, all railroads regardless of size, recognize UNIT as the accepted yardstick for safety, economy and dependability.

UNIT TRUCK CORPORATION - - - - NEW YORK

* Source AAR

SAFE POWERFUL SAFE EFFICIENT SAFE Always Safe



MINER

POWER HAND BRAKE

PATTERN D-3290-X

Certified

BY ASSOCIATION OF AMERICAN RAILROADS

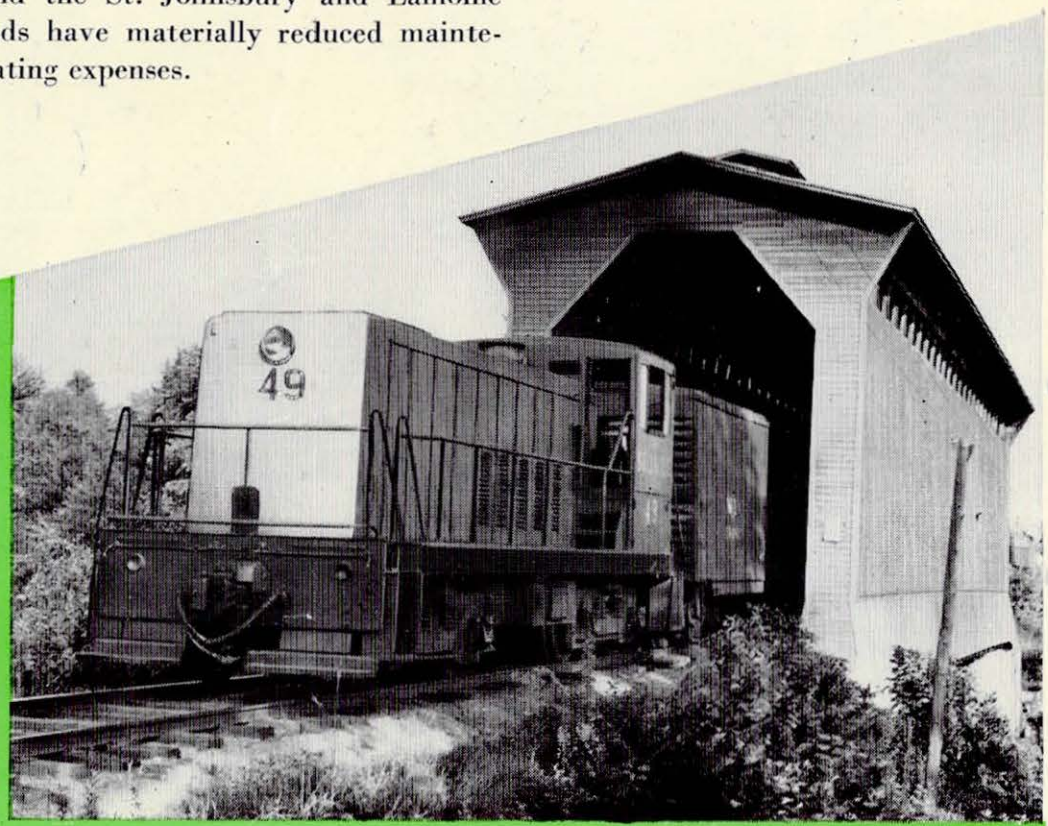
W. H. MINER, INC. CHICAGO

Tough...Economical

LIKE THE VERMONTERS THEY SERVE

Management of two Vermont railroads praises 70-tonner versatility and hauling capacity

Two important New England railroads are handling more freight in less time than ever before. They're doing it with seven new 600-hp, 70-ton diesel-electrics —only half the number of steam locomotives previously employed. Thus, the management of the Barre and Chelsea and the St. Johnsbury and Lamoille County Railroads have materially reduced maintenance and operating expenses.

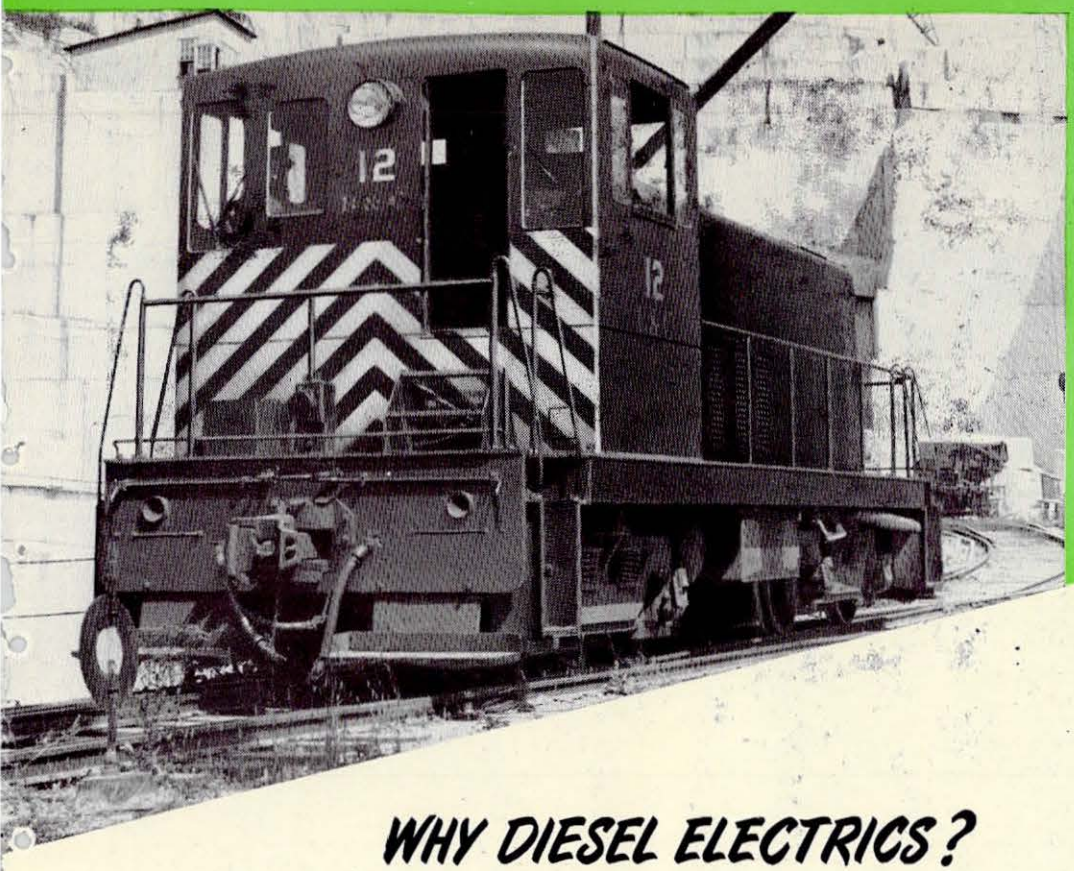


ST. JOHNSBURY
AND LAMOILLE COUNTY

The 70-tonner's light weight and high horsepower is particularly suitable for operation within the 50,000 pound axle load limitations of five covered wooden bridges still in use on the "St. J." since it permits a 30 per-cent safety factor. The 96-mile railroad includes a winding 19-mile climb with a maximum grade of 2¾ per cent.

Alco GE

AMERICAN LOCOMOTIVE



BARRE AND CHELSEA

This B. and C. 70-ton diesel-electric hauls empty flat cars up a six percent grade to the top of Barre mountain and spots them at the quarries. Later, up to 1600-ton trainloads of granite are moved down the steep grade under complete control through a switchback to the city of Barre, Vermont.

WHY DIESEL ELECTRICS?

HERE ARE THE REASONS

High horsepower with light axle loading place the 70-tonner safely within light bridge loading limits, permit safe and dependable operation over light rail. In addition, track maintenance has been reduced considerably.

Because the 70-tonners are equipped with multiple control, they can be used alone or in combination with great flexibility to handle all operating requirements, eliminating the need for three locomotive types and practically eliminating overtime operation.

Since only one diesel-electric size is required (replacing three steam sizes), only one spare parts stock is now needed and a substantial investment in repair facilities was avoided.

Operating economy is already reflected in fuel and maintenance savings. In addition, the clean, safe operation of the 70-ton diesel-electric is an important factor in community and employee relations.

These are only a few of the reasons for diesel-electrics on these two railroads. Many of them are pertinent to your operations. Why not ask your Alco-G.E. representative for more information?

IN CANADA Alco GE IS MLW GE

and GENERAL ELECTRIC

121-52

Wheels built to lead a tough life—and a long one

Service conditions for railroad wheels have become increasingly severe, especially during the past ten years. Faster schedules—necessitating higher speeds and quicker stops—have made stronger, longer-lasting wheels a "must."

In order to produce a wheel with a greater factor of wear-resistance and safety, ARMCO Research Engineers began to work years ago toward three important objectives: (1) to find an analysis of steel that resists thermal cracking; (2) to determine how to limit the growth of a thermal crack, if it should form: and (3) to learn how to heat-treat wheels to obtain the best mechanical properties.

A special wheel-testing machine was developed that could run wheels at speeds of more than 110 m.p.h., then brake them with up to 50,000 lbs. of pressure on each brake shoe. Hundreds of tests were made in laboratories, duplicating all types of service conditions.

Based on the knowledge gained from these investigations, the present ARMCO Wrought Steel Wheel was produced. It is the only wheel whose composition is based on such a broad background of research and experience.

Why not get all the facts? Simply call our nearest district office or write direct to Armco Steel Corporation, 114 Curtis Street, Middletown, Ohio. Export: Armco International Corporation.

ARMCO WROUGHT STEEL WHEELS

ARMCO

Published weekly by Simmons-Boardman Publishing Corporation, Orange, Conn. Executive Offices, 30 Church Street, New York 7, N. Y. Entered as second class matter at Orange, Conn., under the act of March 3, 1879. Subscription price $6.00 for one year, U. S. and Canada. Single copies, 50 cents each. Vol. 126, No. 24.

passenger Comfort *plus*

at a marked saving in maintenance!

There are two good reasons why so many railroads are standardizing on **Airfoam** cushioned seats like those shown in the illustration:

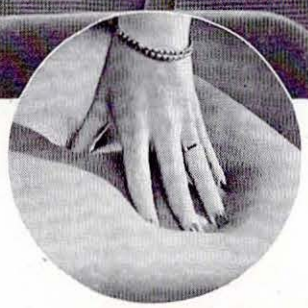
1 *No other type of seat cushioning can match* ***Airfoam*** *for luxurious comfort and easy riding.* It is so buoyant, so relaxing that it pays off in passenger good will alone.

2 ***Airfoam*** *cuts maintenance to the minimum.* It's amazingly durable — keeps its shape and comfort even under the heaviest traffic. Proof? The record of latex-cushioned seats during the tough war years shows they far outlasted conventional cushioned equipment.

Together, these reasons add up to the fact that **Airfoam** is your best buy. Specify **Airfoam** cushioning for your new cars and when you refit old equipment. For full information and prices, write Goodyear, Manufacturers' Sales Department, Akron 16, Ohio.

At left, de luxe seat, super-cushioned with **Airfoam** *by Coach & Car Equipment Corporation.*

Below, lounge-grill coach built by American Car and Foundry Company for the Texas Pacific Railroad.



Quick test for real comfort

Airfoam *gives to the lightest touch, comes back the moment pressure is lifted. It's this airy buoyancy that makes* **Airfoam** *so utterly restful.*

Airfoam

SUPER-CUSHIONING BY

GOODYEAR

THE GREATEST NAME IN RUBBER

Airfoam—T.M. The Goodyear Tire & Rubber Company

EXIDE-IRONCLAD BATTERIES

for dependability and long life in

CAR LIGHTING AND AIR-CONDITIONING SERVICE

1888...DEPENDABLE BATTERIES FOR 61 YEARS...1949

passenger Comfort *plus*

at a marked saving in maintenance!

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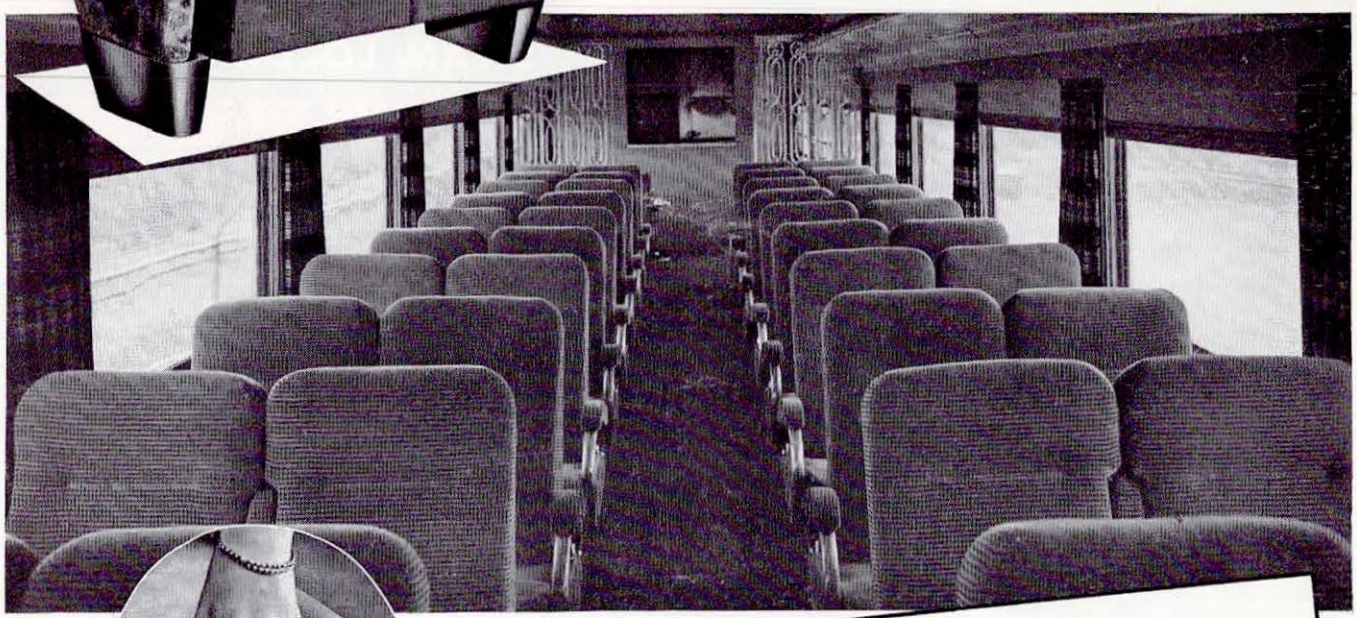

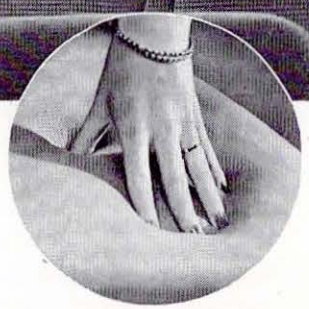

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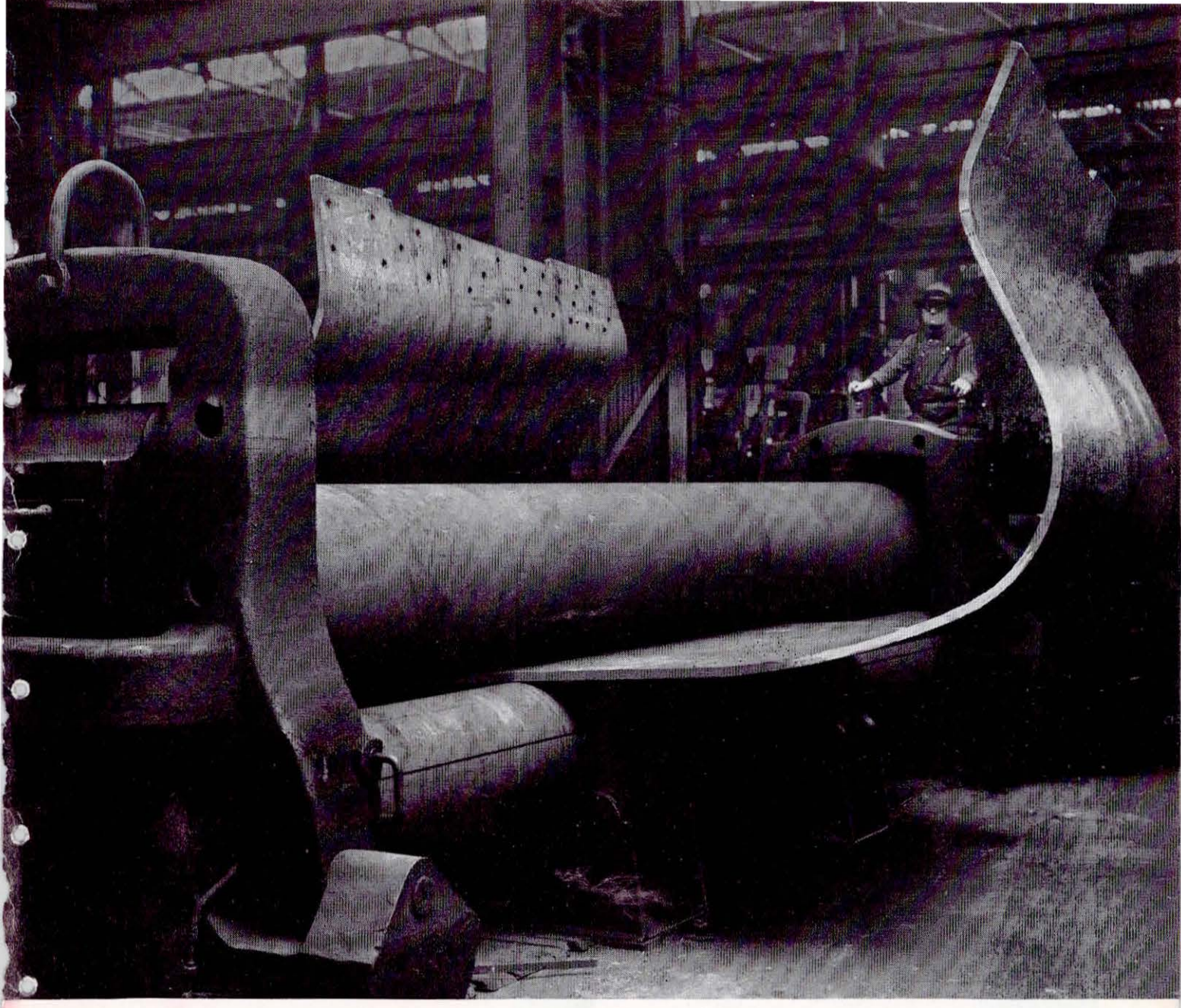
SUPER-CUSHIONING BY

GOODYEAR

THE GREATEST NAME IN RUBBER

Airfoam—T.M. The Goodyear Tire & Rubber Company

MAKE BALDWIN
YOUR HEADQUARTERS FOR
STEAM LOCOMOTIVE
SPARE AND
REPLACEMENT PARTS



Baldwin's unequaled facilities and experience in the steam locomotive field are at your disposal—not only for the manufacture of complete locomotives, but for precision production of the spare and replacement parts needed to keep your present steam power in top operating condition.

Let us quote on your requirements for complete boilers, fireboxes, wheels, axles, connecting rods, motion work, equalizers and other components for your locomotives regardless of whether they were originally built by Baldwin or not.

Let our representative tell you how you can profit by making Baldwin your headquarters for the supply of steam locomotive parts.

The Baldwin Locomotive Works, Philadelphia 42, Pa., U. S. A.
Offices: Boston, Chicago, Cleveland, Houston, New York, Philadelphia, Pittsburgh, San Francisco, Seattle, St. Louis, Washington.

BLW THE BALDWIN GROUP **BALDWIN**

EXIDE-IRONCLAD BATTERIES

for dependability and long life in

CAR LIGHTING AND AIR-CONDITIONING SERVICE

1888...DEPENDABLE BATTERIES FOR 61 YEARS...1949

EXIDE-IRONCLAD Batteries are DIFFERENT!

in CONSTRUCTION... in PERFORMANCE

There is no other battery like an Exide-Ironclad . . . in design, construction, service qualities. It is built specifically to meet the increased storage battery needs of today's passenger trains . . . to deliver maximum output under heavy demands . . . to maintain a high voltage even during long stops . . . to give long, trouble-free service.

The superior performance of Exide-Ironclad Batteries in car lighting, air-conditioning and other passenger train services, is made possible by the unique positive plate, described at right.

THEY HAVE ALL FOUR OF THE ESSENTIAL CHARACTERISTICS

Exide-Ironclad Batteries have ALL FOUR of the essential characteristics that a storage battery must have to assure maximum performance in railway service—high power ability, high electrical efficiency, ruggedness and a long life with minimum maintenance. The combination of these four Exide-Ironclad characteristics assures years of day-in, day-out service with dependability and economy.

Exide-Ironclad POSITIVE PLATE

Consists of a series of slotted tubes containing the active material. So fine are these slots that, while permitting easy access of electrolyte, they retard the active material from readily washing out or jarring loose . . . adding considerably to life of battery.

Enlarged cutaway view of section of tube of positive plate.

DEPENDABLE POWER

"Exide-Ironclad" *Reg. Trade-mark U. S. Pat. Off.*

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia 32 • *Exide Batteries of Canada, Limited, Toronto*

Which of these 7

WILL GIVE YOU BEST ELECTRICAL CABLE

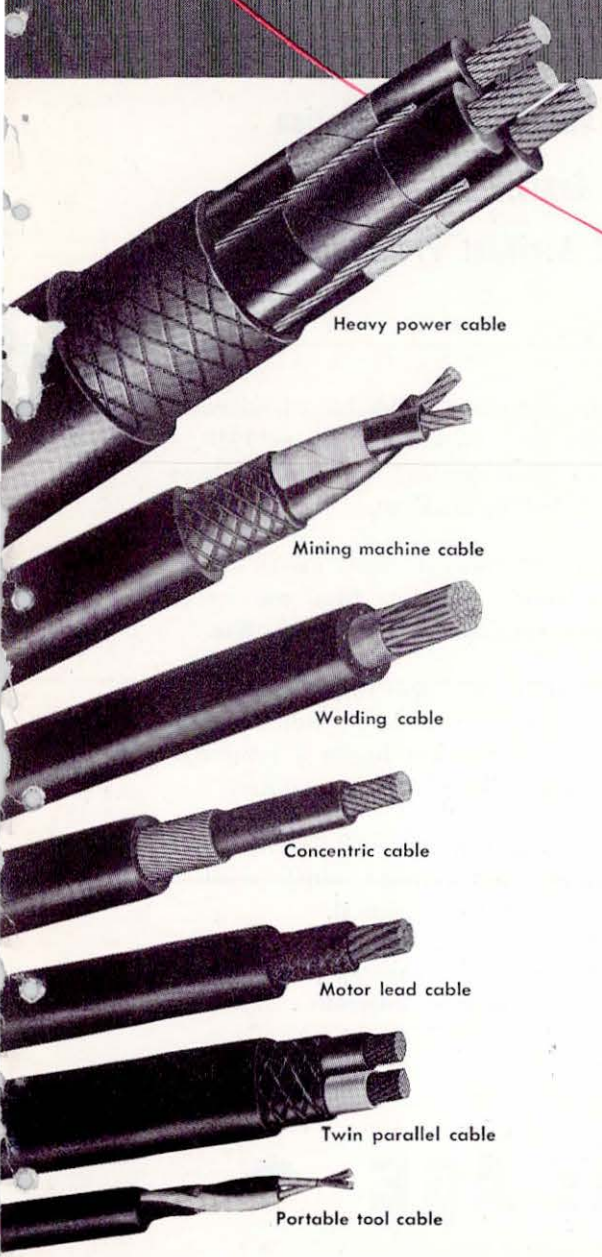
PROPERTIES AND TESTS		REPRESENTATIVE TEST VALUES FOR VARIOUS COMPOUNDS						
		AMARINE —40	AMERZONE —O	AMERZONE —B	AMARINE —RWS	AMERITE	AMPEROX	AMERPRENE
BASIC TYPE OF INSULATION		Natural Rubber	Oil-base	Butyl Rubber	Synthetic Rubber	Commercial 30%	Heat-Resistant	Polychlor-oprene
MAX. REC. COPPER TEMP.		60°C	75°C	80°C	75°C	60°C	75°C	80°C
ELECTRICAL CHARACTERISTICS	Dielectric Constant (Spec. Ind. Cap.)	4.0	4.0	4.0	4.5	4.5	4.5	....
	Ins. Res. (K)	50,000	7,500	40,000	30,000	30,000	20,000	100
	Dielec. strength in volts per mil	450	350	300	400	400	350	200
PHYSICAL PROPERTIES	Tensile Strength in lbs. per sq. in.	2000	600	700	950	1000 Synth. 1500 Nat.	1000 Synth. 1800 Nat.	2000
	Elongation in 2"	450%	300%	400%	450%	500%	500%	500%
	Permanent set	¼"	½"	⅜"	⅜"	¼"	¼"	¼"
ACCELERATED AGING	Type of test	Geer Oven	Geer Oven	Geer Oven	Oxygen Bomb	Geer Oven	Oxygen Bomb	Geer Oven
	Temperature	70°C	80°C	100°C	80°C	70°C	80°C	80°C
	Hours	288	168	672	168	504	336	168
	% Original Tensile Strength	70%	80%	80%	80%	85%	80%	90%
MOISTURE RESISTANCE	Gain in wt. after 7 days immersion at 70°C (Mg. per sq. in.)	25	....	20 or less	15 or less	35	35	30-60
	Capacity increase after 4 weeks immersion at room temperature	15%	15%	15%	10%	15%	15%	....
	Stability Factor 40-80 volts per mil 2 weeks at 50°C	.5%	1.5%	1.0%	.8%	2.0%	3.5%	....
SPECIAL PROPERTIES		High Voltage and Submarine use	Meets IPCEA ozone test	Withstands .03 conc. 10 hours	For hot and moist locations	General purpose rubber insulation	General purpose rubber insulation	Resistant to oil, flame and ozone

As the test data vary considerably with different sizes of conductor and thicknesses of insulation, these identical results can not be guaranteed throughout the whole range of sizes and voltage ratings. Some specific constructions will test higher and others will test lower than the listed values. However, the above table indicates in general what may be expected of these compounds.

AMERICAN STEEL & WIRE COMPANY

rubber compounds

PERFORMANCE AT THE LEAST COST?



THE proper selection of rubber compounds for electrical cable may mean the difference between long satisfactory service or frequent and costly shut-downs for repairs.

Some rubber compounds will stand more heat than others. Some can be used underground—others can't. The point to remember is this —*no one or two rubber compounds will meet all the conditions encountered in electrical cable operation.* That's why engineers and chemists at American Steel and Wire Company have perfected a wide variety of rubber compounds for different cable applications.

The right combination of compounds will assure better service from electrical cables at lower cost to you.

A GUIDE TO SELECT RUBBER COMPOUNDS

	SPECIFY
FOR UNDERGROUND OR UNDER WATER SERVICE—at high voltages, for all submarine power cables and for general use above 7,500 volts—	AMARINE—40
FOR OZONE-RESISTANCE—Amerzone-0 is an excellent oil-base compound. Amerzone-B is a butyl rubber compound that is highly resistant to heat and moisture as well as ozone.	AMERZONE
HOT OR DAMP LOCATIONS—Select a compound with high moisture resistance and high heat resistance.	AMARINE—RWS
GENERAL USE—For voltages up to 7,500 where copper temperatures do not exceed 60°C (140°F.), a performance type compound is satisfactory.	AMERITE
GENERAL USE with HEAT RESISTANCE—For voltages to 7,500 and where copper temperatures may run up to 75°C. (167°F.).	AMPEROX
FLEXIBLE JACKETS—Where resistance to oil, flame and sunlight is desired a compound containing Neoprene is recommended.	AMERPRENE

AMERICAN STEEL & WIRE COMPANY, GENERAL OFFICES: CLEVELAND, OHIO
COLUMBIA STEEL COMPANY, SAN FRANCISCO, PACIFIC COAST DISTRIBUTORS
TENNESSEE COAL, IRON & RAILROAD COMPANY, BIRMINGHAM, SOUTHERN DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

Standard cable construction or special designs of cable are available from American Steel and Wire Company. We make the cable fit the job. This policy assures the longest cable life at lowest cost to the user..

AMERCLAD CABLES

UNITED STATES STEEL

"FOR EXCEPTIONAL LEADER AND SUPPORT..."

RAILWAY AGE Wins

Honored by National Safety Council for Publication in 1948 of 54 Editorials, Feature Articles and News Items on Safety and Accident Prevention

BEHIND this award to *Railway Age* is a story of publishing leadership in the railway safety movement that goes back 39 years to 1910, a year in which one railway employee out of every 502, and one railway passenger out of every 3 million were killed in accidents.

In the summer of that year, R. C. Richards, general claim agent of the Chicago & North Western endeavored to launch a "safety first" movement in a stirring speech to railroad officers and employees at Baraboo, Wis.

The editor of *Railway Age* attended the meeting and was impressed by the possibilities of an organized effort to reduce the accident toll. He not only published extensive excerpts from the speech but began a campaign to extend the safety first movement over the railroads of the country.

The effort was extraordinarily effective . . . and today *Railway Age* continues unceasingly to promote greater safety—a campaign which resulted in the special 1948 award from the National Safety Council.

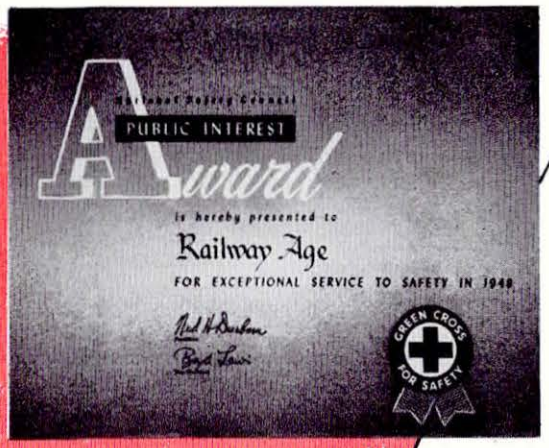
This is just one example of the pioneering effort for railway progress that *Railway Age* constantly exerts through its editorial columns . . . a true badge of publishing leadership.

ABC **RAILWAY AGE** ABP

FIRST IN ITS FIELD ★ IN CAMPAIGNS FOR PR

SHIP

National Safety Award



NATIONAL SAFETY COUNCIL
20 NORTH WACKER DRIVE
CHICAGO 6, ILLINOIS

April 12, 1949

Messrs. Samuel O. Dunn and James G. Lyne
Editors
Railway Age
105 W. Adams Street
Chicago 3, Illinois

Dear Messrs Dunn and Lyne:

It is my privilege and pleasure to tell you that your organization has been voted the National Safety Council's Public Interest Award for 1948.

The Judges have asked me to convey to you, along with the Council's sincere thanks, their deep appreciation of the exceptional service you have given safety through your accident prevention activities.

Heartiest congratulations on a job well done -- and our sincere hope that you will continue to support safety so aggressively and continuously this year that you may be nominated for the 1949 award!

Sincerely,

Ned H. Dearborn

Ned H. Dearborn
President

NHD:dh
Encl.

93rd YEAR

OGRESS AND IMPROVED PUBLIC RELATIONS

MORE TRACKAGE TAMPED PER DAY

with BARCO

The fast, powerful blows of a Barco Tytamper enable a man to double his output. Self-contained and portable and light, these economical workers save extra time at congested spots because they work fast, can be moved quickly off the right-of-way. Barco tamps the ballast firmly and uniformly, making it less subject to compression from passing trains. It is not necessary to ride the BARCO tytampers in tamping cemented ballast. For more information on this hard-hitting, economical tool, write today to the Barco Manufacturing Co., 1800F Winnemac Avenue, Chicago 40, Illinois. In Canada: The Holden Co., Ltd., Montreal, Canada.

BARCO

UNIT TYTAMPERS

FREE ENTERPRISE . . . THE CORNERSTONE OF AMERICAN PROSPERITY

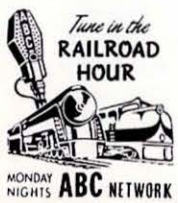
Easy to See!

It's easy to see how A.S.F. Ride-Control Trucks protect roadbed, car, and contents. Constant, *uniform* pressure, between friction shoes in the bolster and plates welded to the side frame, cushions the movement of soft, long-travel springs . . . smooths and controls all bolster motion for an easy, *all-speed* ride.

A NEW CONVENIENCE . . . Today, it's easier than ever to recognize this modern equipment. Trucks now being delivered carry their name on the side of the *flanged spring seat*—a very appropriate location because A.S.F. originated this *parts-saving* spring seat design. But it makes no difference where you find the name. Actions speak *much* louder than words for the smooth-rolling Ride-Control Truck.

A-S-F *Ride-Control* TRUCK

CONSTANT FRICTION CONTROL
LONG SPRING TRAVEL



AMERICAN STEEL FOUNDRIES

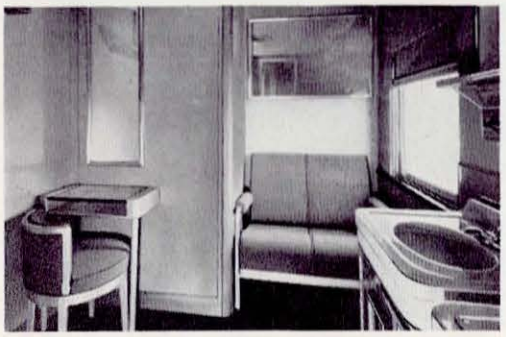
MINT MARK OF ⬡ FINE CAST STEEL

Newest addition to the famous Southern Belle Fleet of the Kansas City Southern Lines.

The NEW Southern Belle makes her debut with Goodall Fabrics...of course!

New Luxurious Chair Cars. Goodall Fabrics upholster these scientifically designed coach seats to give greater comfort, beauty and durability. Also, the inside facing of the window shades is by Goodall.

Attractive Ladies' Lounge. Comfort is the keynote of this smart lounge and Goodall Fabrics upholstery gives the added benefits of luxurious texture that is hard-to-soil.



New Southern Belle Diner. The amazing ease of cleaning and resistance to soil makes Goodall Fabrics the ideal choice for the smart new dining cars.

WHEN RAILROAD MEN want the best in wearability, comfort and luxury, they naturally turn to Goodall Fabrics—always a favorite in the transportation field. The secret's in the Goodall blend of individual fibers—each selected for its outstanding quality—woven into fabrics of unusual beauty and serviceability. That's why the choice of Goodall Fabrics means greater passenger satisfaction with durability and low cost.

GOODALL... America's first manufacturer of specialized fabrics for transportation needs...

Fabric feature of today's most beautiful trains.

Goodall-Fabrics, Inc.
Subsidiary of Goodall-Sanford, Inc.
THE FINEST NAME IN FABRICS

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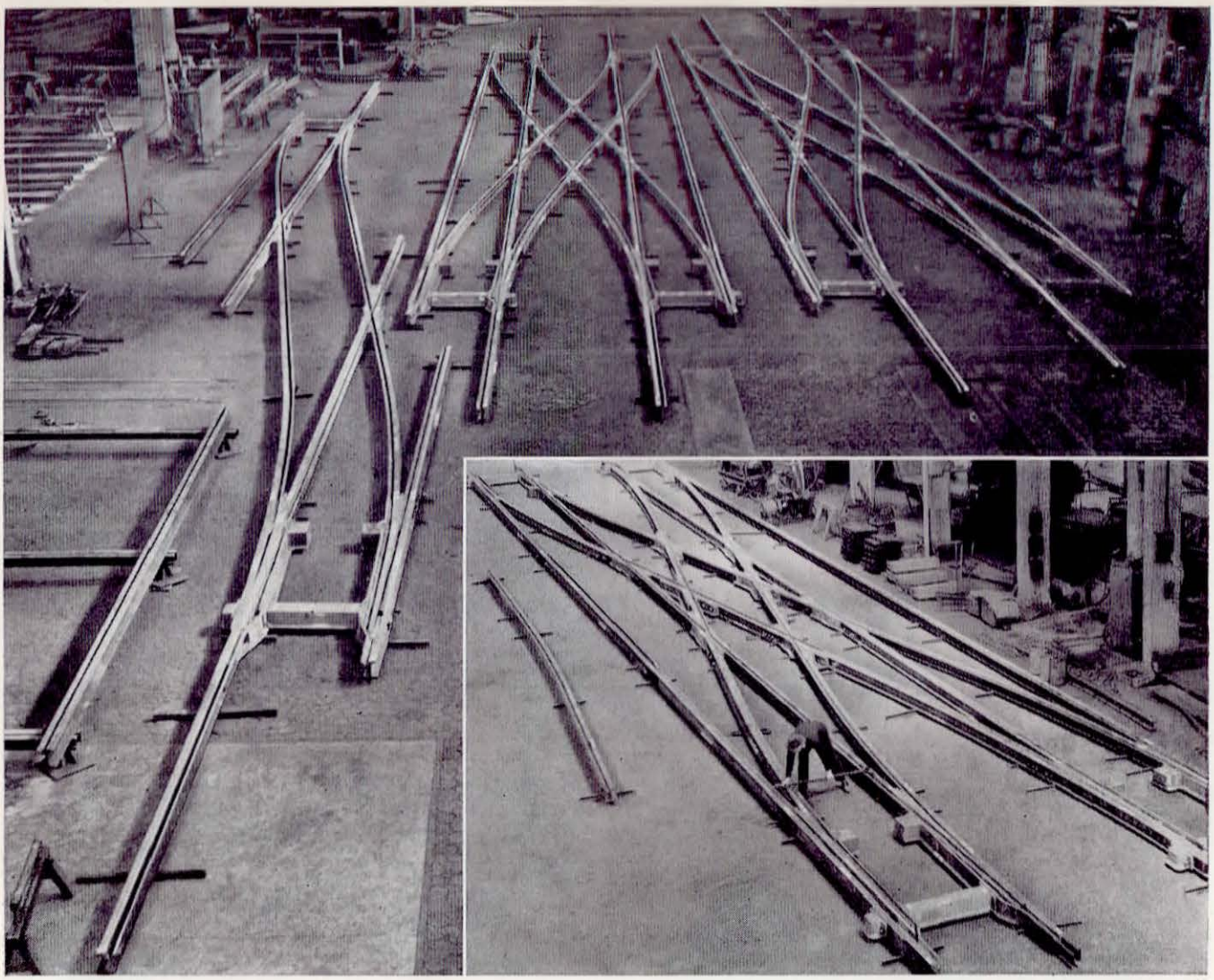
GOODALL FABRICS, INC. NEW YORK • BOSTON • CHICAGO • DETROIT • SAN FRANCISCO • LOS ANGELES

SAFE
SOUND • ECONOMICAL
in daily road service on many of America's leading railroads
LATERAL VERTICAL
SCULLIN L-V TRUCKS
CUSHIONED MOTION
50 YEARS PROGRESS
SCULLIN STEEL CO.
SAINT LOUIS 10, MISSOURI
NEW YORK • CHICAGO • CLEVELAND • BALTIMORE • RICHMOND, VA. • MEXICO CITY, D. F.



More special trackwork by BETHLEHEM

Here's another "special" in the making at Bethlehem's track shops, where unique and difficult jobs are no strangers. We've been turning them out for years, and today we are prepared better than ever for work of this nature.

The track shown here was part of a layout required when a West Coast terminal pier system was enlarged. Bethlehem was well set up to handle the special problems involved, and the job went off like clockwork.

Whenever you are considering new trackage—special or standard—let Bethlehem help you plan it. We are equipped to furnish everything you need, including the services of competent track engineers. Inquiries are always welcomed, whether your job is elaborate or on the small, simple side.

And remember, Bethlehem also manufactures a complete line of modern track accessories, including switch stands, rail braces, guard rails, frog plates, switch heaters, gage rods, etc. For full details of these products and Bethlehem's special services, ask our nearest representative to get in touch with you.

BETHLEHEM STEEL COMPANY, BETHLEHEM, PA.

On the Pacific Coast Bethlehem products are sold by
Bethlehem Pacific Coast Steel Corporation

Export Distributor: Bethlehem Steel Export Corporation

★ BETHLEHEM STEEL ★

RID YOUR TRACKS OF WEEDS . . . *PERMANENTLY*

with GENERAL CHEMICAL Formula 7B Weed Killer

WHY BE CONTENT WITH temporary, *seasonal* relief from railroad weeds and grass? Now your goal can be complete elimination of this nuisance . . . by regular use of General Chemical Formula 7B Weed Killer.

FORMULA 7B is the ideal formulation for controlling weeds and grass—its special Trichloroacetic Acid and Oil combination is the secret of its powerful effectiveness.

IT IS this unique formula *made for railway weed control alone* that assures you of ultimate sterilization of weeds and grass . . . not merely short-term relief.

COMPLETE CONTROL FOR ALL CONDITIONS

By actual test—this highly potent weed killer gets results where many ordinary weed killers fail. See for yourself what it can do for your tracks. A "custom-planned" application service of Formula 7B is available to combat all conditions of railroad weeds and grass.

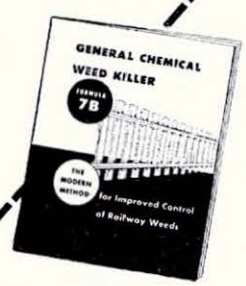
KILLS Grasses

KILLS Broad-leaved Weeds

SUPPRESSES Seed Germination

RESISTS Washing Away by Rainfall

Helps **PRESERVE** Track Structure



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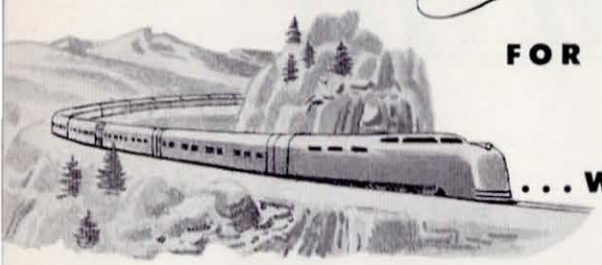

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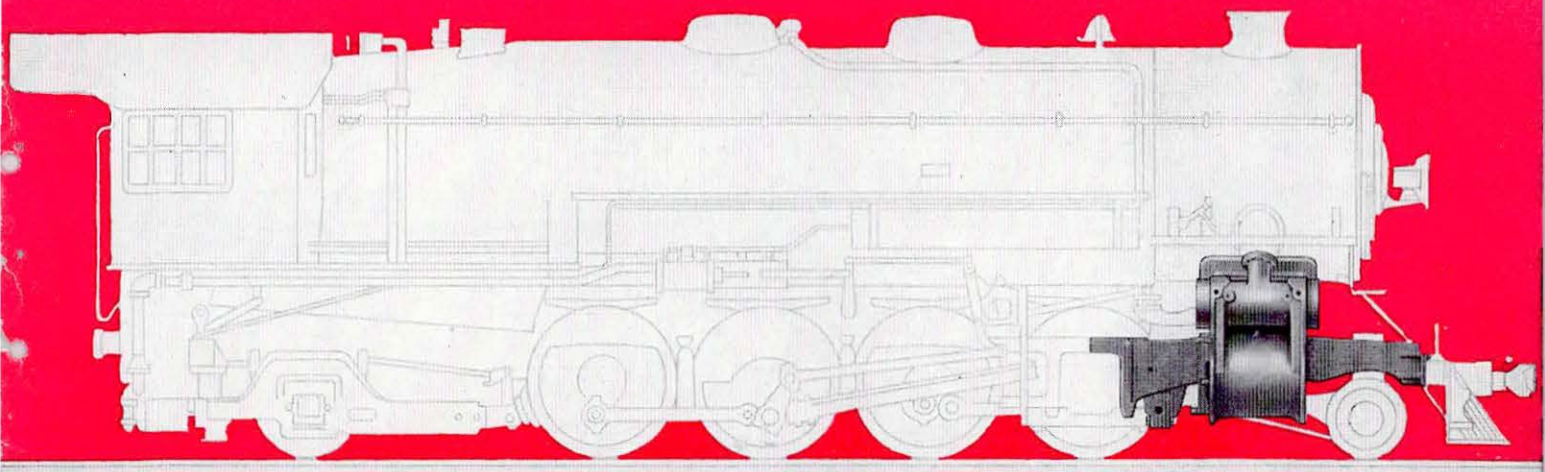
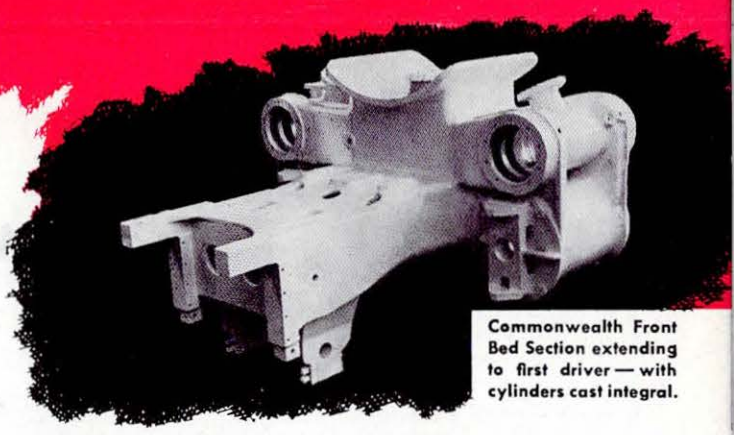


with COMMONWEALTH One-Piece FRONT BED SECTIONS



Commonwealth Front Bed Section extending to first driver — with cylinders cast integral.

To conserve secondary steam power and to improve performance, many railroads are applying **COMMONWEALTH** One-Piece Cast Steel FRONT BED SECTIONS with integral cylinders to their bar frame steam locomotives. These castings follow the same highly successful, thoroughly proven design developed for the **COMMONWEALTH** One-Piece Locomotive Beds.

COMMONWEALTH Front Bed Sections are designed to extend to the first or second driving wheel pedestal—depending upon your particular requirements. They strengthen bar frame locomotives at their weakest points and overcome costly failures of bolted cylinders and front portions of main frames. Continuous loosening of cylinder bolts is eliminated, maintenance expense reduced and greater availability for service is assured. The improved **COMMONWEALTH** cylinder design provides free-flowing exhaust and steam passages which effectively step up operating efficiency.

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GENERAL STEEL CASTINGS

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Plymetl

The material that's making news today

There are many reasons why Haskelite Plymetl has been specified for use in 80% of the new passenger cars now on order. Besides being sound deadening, easily fabricated and applied, its use drastically cuts deadweight. The chart below gives the strength and weight characteristics of Plymetl. It emphasizes the reasons why weight savings as high as 7600 pounds per car may be effected when Plymetl is used for partitions, bulkheads, pier panels, wainscoting and doors.

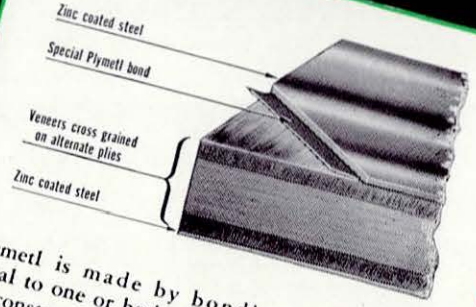
	PLYMETL UVU			STEEL U.S. STD. GAUGES			ALUMINUM B & S STD. GAUGES		
	1/4"	5/16"	3/8"	20 ga.	16 ga.	12 ga.	10 ga.	8 ga.	6 ga.
Weight in lbs. per sq. ft.	1.01	1.17	1.43	1.5	2.5	4.37	1.44	1.81	2.28
Stiffness factor E I in. ² lbs.	4,900	8,400	13,200	124	575	3,050	872	1,760	3,500

	PLYMETL EVE			STEEL U.S. STD. GAUGES			ALUMINUM B & S STD. GAUGES		
	1/4"	5/16"	3/8"	20 ga.	16 ga.	12 ga.	10 ga.	8 ga.	6 ga.
Weight in lbs. per sq. ft.	2.25	2.40	2.56	1.5	2.5	4.37	1.44	1.81	2.28
Stiffness factor E I in. ² lbs.	17,000	28,000	43,000	124	575	3,050	872	1,760	3,500

Where rigidity is of prime importance consider the following: A 3/8 in. UVU Plymetl panel (aluminum two sides) weighs 1.43 pounds per square foot. The weight of 20 gauge steel is 1.5 pounds per square foot. The Plymetl panel though lighter in weight has 100 times the stiffness of the sheet steel.

It is also true that a 3/8 in. Plymetl panel (UVU) has about the same stiffness factor as 1/4 in. aluminum; yet the 1/4 in. aluminum sheet is 2-1/2 times heavier than the 3/8 in. Plymetl panel.

In computing the values of Plymetl, the following is assumed: (1) The modulus of elasticity of steel, 30,000,000 lbs. per sq. in. (2) The modulus of elasticity of aluminum, 10,000,000 lbs. per sq. in. (3) The modulus of elasticity for the core material, 1,300,000 lbs. per sq. in. along the grain. 65,000 lbs. per sq. in. across the grain. (4) The thickness of steel and aluminum, .021" (27 ga.) and .015", respectively. (5) The weight of plywood plaque, 30 lbs. per cu. ft.



Plymetl is made by bonding thin sheets of metal to one or both faces of a plywood plaque. Its construction effects the most efficient distribution of these materials, combining high strength qualities of the metal surfaces with low density of woods. Result: Plymetl makes an ideal structural material, simulating an I beam with the metal surfaces taking the part of the flanges and the light weight plaque acting as the web.

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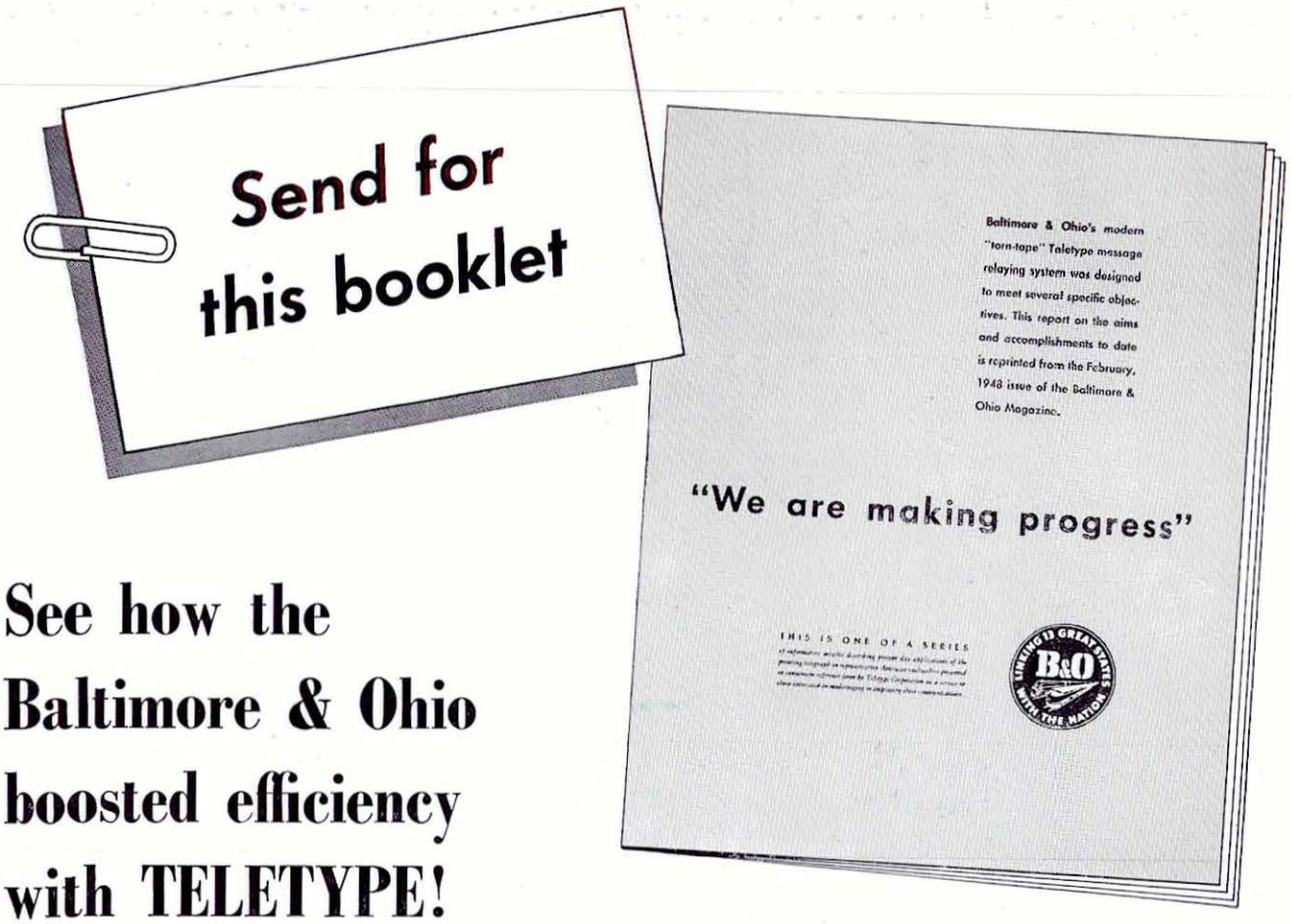
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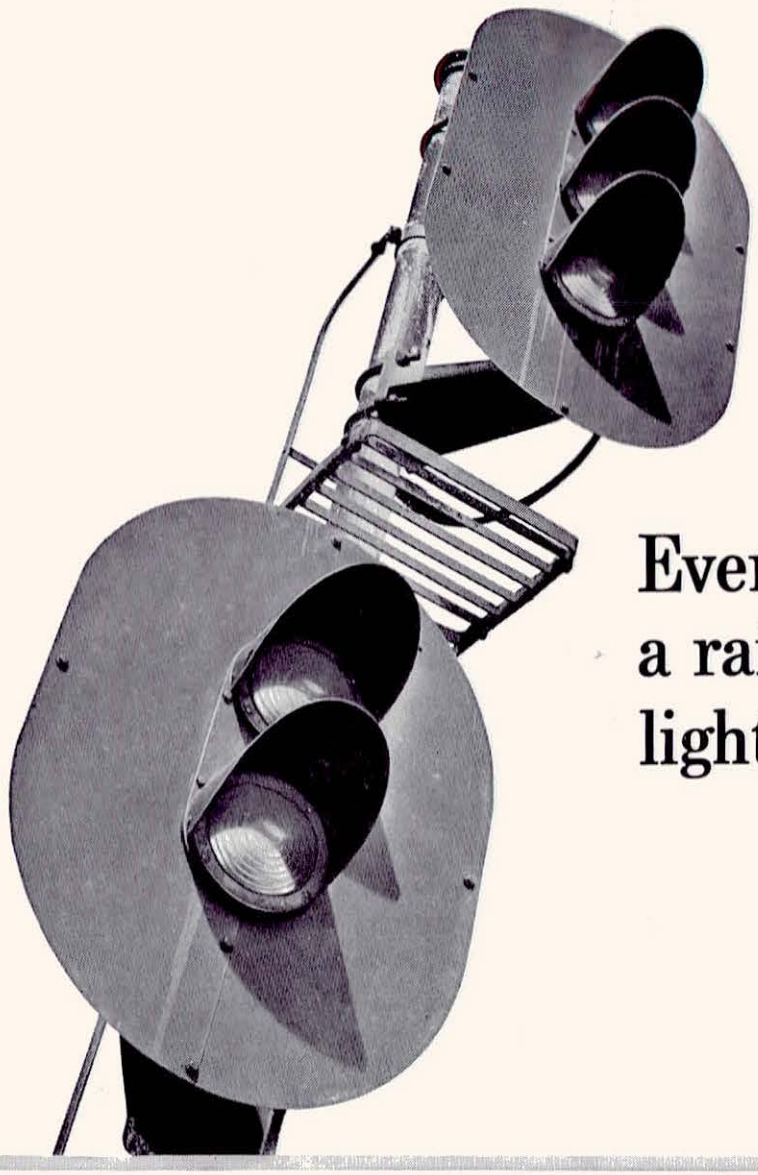

Ever watch a railroad's eyes light up?

You've watched the lights – green, yellow, red – which control the traffic on our city streets. But have you ever watched the "eyes" along the railroad tracks – from which the highway signals were adapted – light up with their messages?

On the railroads, the red – or horizontal signal position—says "Stop." The yellow – or diagonal position – says "Reduce speed and proceed, prepared to stop at the next signal." And the green—or vertical position—tells the engineer when the track's all clear ahead.

But these three basic messages of the signals are only "baby talk" compared with what they tell when two or more colors – or signal positions – come up simultaneously and in combination. Then, they not only tell the engineer what's ahead for two or more "blocks" of track, they also tell him how to handle his train until the next signal gives him more news of the traffic situation up ahead.

The trains themselves, as they pass along the line, cause the signals to report their positions to following or approaching trains. In many systems, indeed, they do even more, for they report also to the train dispatcher, watching his illuminated control board maybe a hundred or more miles away, just where each train in his district is, minute by minute. The result is that trains can keep moving—steadily, safely, spaced the proper distances apart.

These signal systems installed on busy railroad lines are but one result of the unremitting search for ways of improving every detail of railroad service. They are but one reason for the railroads' unsurpassed record of safety. They are but one factor in the constant improvement in efficiency with which the railroads are meeting the challenge of today's high costs—with rates which, in relation to the prices of the commodities transported, are lower than they have been since before the *first* World War.

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The metallurgical engineers of the Vanadium Corporation of America realize that each part is an individual problem, and they are prepared to cooperate with you to the fullest extent in selecting the best material for each application.

PART	MATERIAL
SPRINGS	Cr-V (SAE 6150) steel Cr-Mo-V steel Si-V steel Cr-W-V steel
CRANKSHAFT	SAE 4140+V SAE 4340+V Cr-V (SAE 6140) steel
AXLES	C-V steel Cr-V (SAE 6145) steel Mn-V steel
GEARS AND PINIONS	Cr-V (SAE 6145) steel
CONNECTING RODS	Cr-V (SAE 6135) steel Cr-V (SAE 6140) steel
BOLTS	Cr-V (SAE 6135) steel Mn-Cr-V (Normalloy) steel
PISTON PINS	Cr-V (A 6120) steel
WHEELS	C-V steel Cr-V steel Mn-V steel Mn-Cr-V steel
CRANKCASE	Mn-Mo-V cast steel Mn-V cast steel Mn-V plate steel (welded)
INJECTOR TIPS	Cr-V (SAE 6145) steel
OIL PAN BED	Mn-Mo-V cast steel Mn-V cast steel Mn-V plate steel
TRUCK FRAME AND BOLSTER	C-V cast steel Ni-V cast steel Mn-Ni-V cast steel Mn-V cast steel Mn-V plate steel (welded) Mn-Mo-V plate steel (welded)
TRAILING TRUCK CASTINGS	Mn-V cast steel Ni-V cast steel
COUPLERS	Mn-V cast steel
BRAKE RIGGING CASTINGS	Mn-V cast steel
COMMUTATOR SPIDER CASTINGS	Mn-V cast steel
CYLINDERS	Cr-V cast iron (Cr added as V-5*)
CYLINDER HEADS	Mo-V cast iron, Graphidox-treated** Ni-Mo-V cast iron Cr cast iron (Cr added as V-5*)
CYLINDER LINERS	Ni-Cr-Mo cast iron, Graphidox-treated** (quenched) Cr-Mo-V cast iron
PISTONS	Cr cast iron (Cr added as V-5*) Mo-V cast iron, Graphidox-treated**

*V-5 is an iron foundry alloy for reduction of chill and promotion of uniformity throughout heavy sections.

**Graphidox is a graphitizing and deoxidizing alloy.

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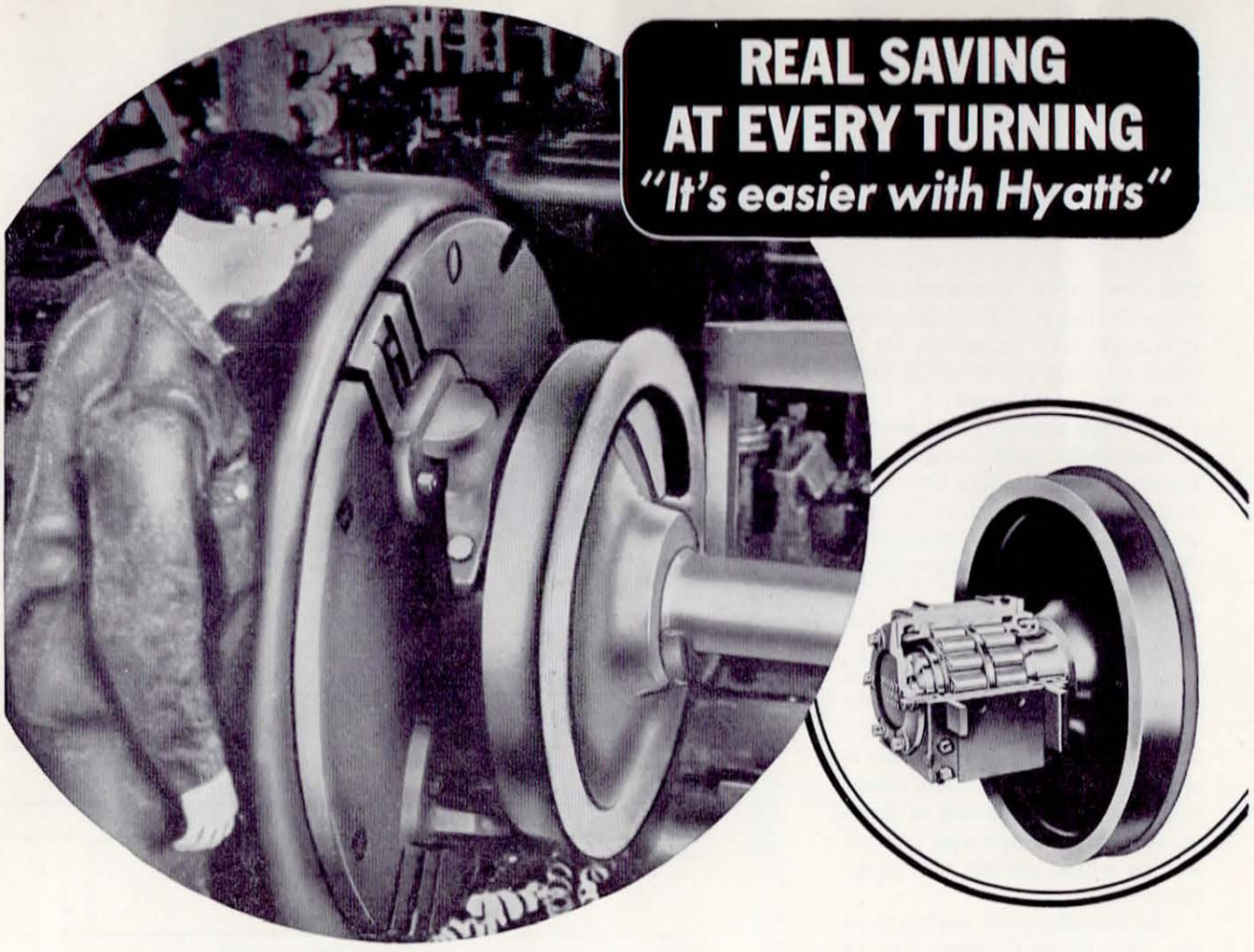

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Yes, when you use Hyatts, it is truly easier all around—easier on shop personnel, easier on your maintenance budget, and easier on the passenger. In brief, "It's easier with Hyatts". Let us show you what we can do for you—write for further details. Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.

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Vol. 126, No. 24 June 11, 1949

RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name Registered in U. S. Patent Office and Trade Marks Office in Canada.

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H. E. McCandless, Circulation Manager, 30 Church Street, New York 7.

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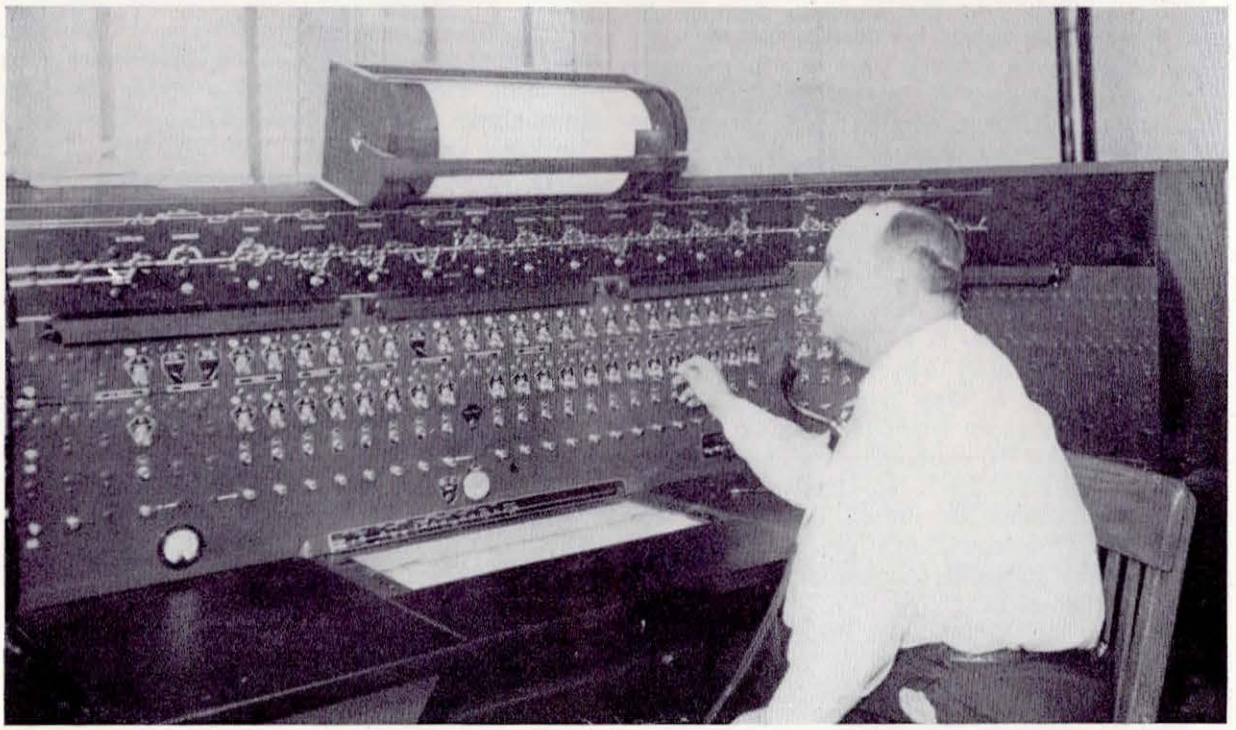
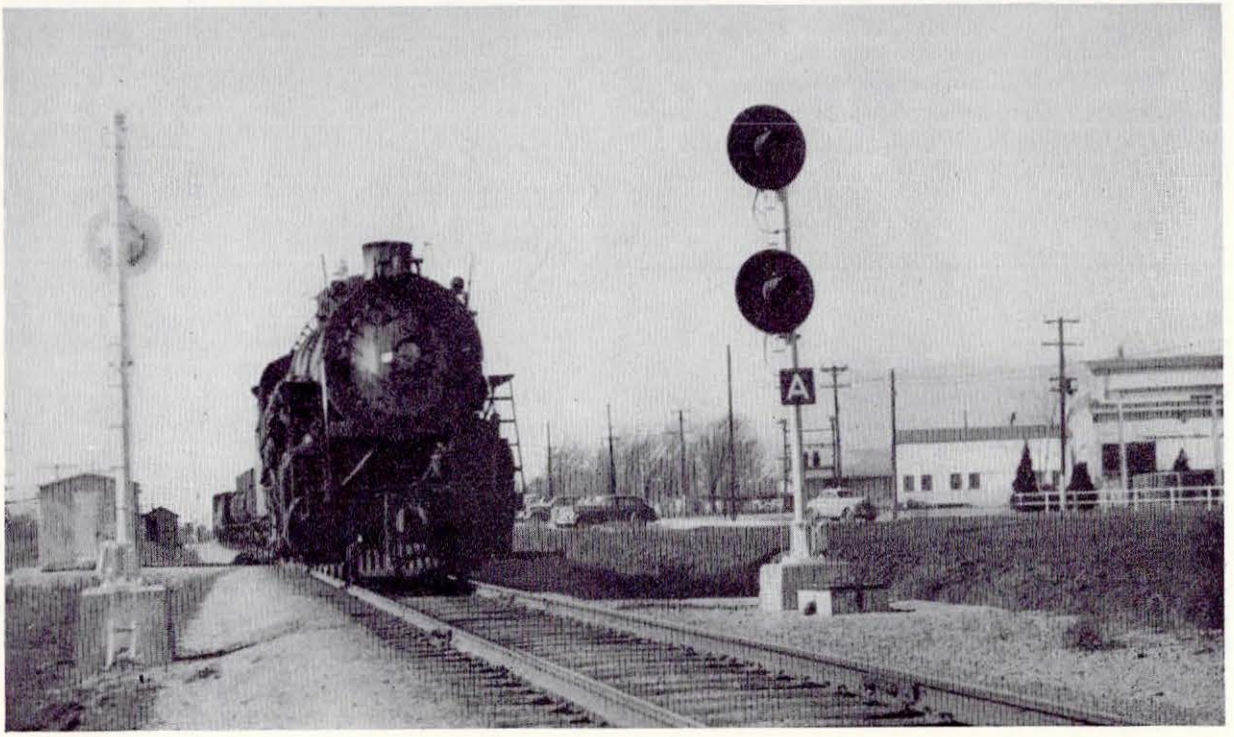
C. T. C. SAVES



Above—The C.T.C. between East Tulsa and Afton is controlled by a machine in the dispatcher's office at Tulsa. Below—Eastbound freight train passing over the No. 20 equilateral turnout at East Tulsa



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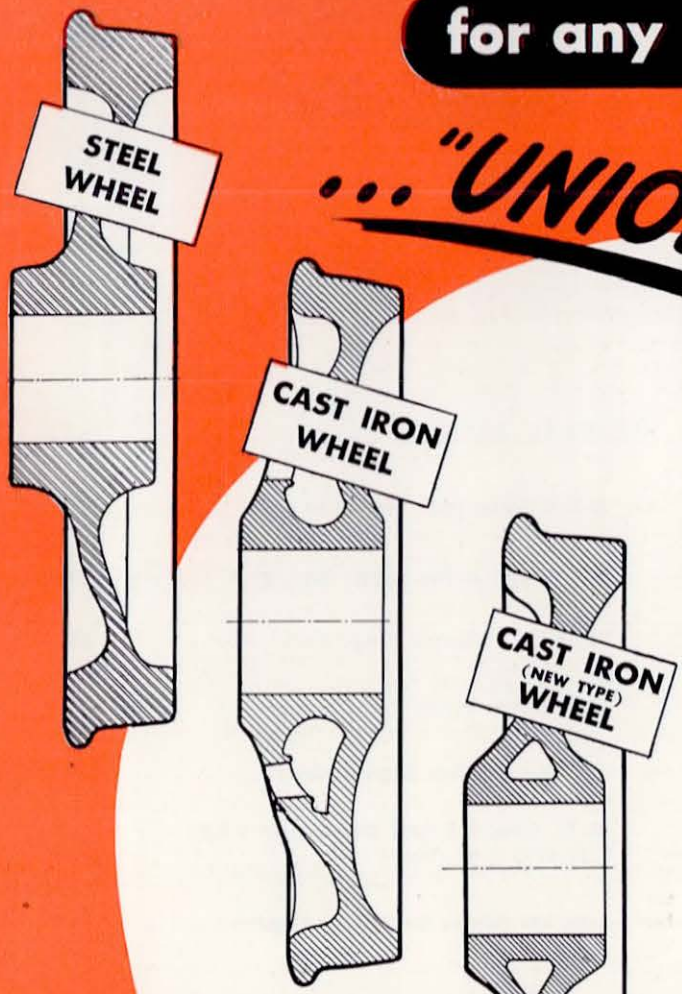
for any width car wheel...

...*"UNION" Car Retarders*



Since *air* is the braking power in "Union" Car Retarders, variations in car wheel widths play no part in retarding pressures. Regardless of how much, or how little, the car wheels move the retarder brake shoes because of variations in wheel widths, the pressure chosen by the operator is actually exerted, and constantly uniform.

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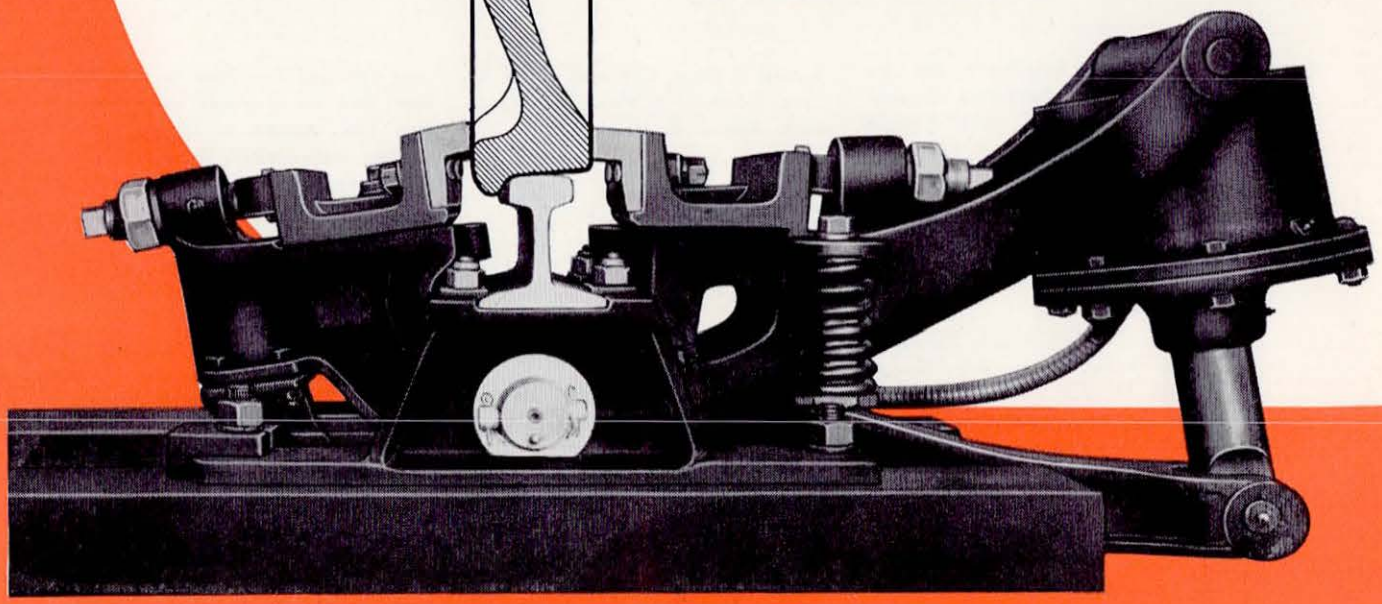

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WEEK AT A GLANCE

UNDER THE CAPITOL DOME: As our leading editorial makes abundantly clear, developments in Congress can—and often do—affect the railroads—either for better or worse—frequently, of course, the latter. One development of that type, covered in the week's News, was the introduction, in both Senate and House, of resolutions for approval of the St. Lawrence seaway on a "self-liquidating" basis. But there was also one favorable—and surprising—development—passage by the Senate on June 1 of the O'Mahoney bill to legalize absorption of freight charges by sellers undertaking to reach distant markets.

WHAT ABOUT FREIGHT CLAIMS? With the annual meeting of the A.A.R. Freight Claim Division scheduled for next week at Boston, it is appropriate to review the present situation with respect to payments for lost or damaged freight. Starting, therefore, on page 39, is an abstract of a paper recently presented at Chicago by A. L. Green, senior special representative of the division. Mr. Green finds encouraging promise of improvement, but points out many steps that can still be taken to reduce the economic waste that such claim payments represent.

OLD LANDMARK COMES DOWN: Engineering articles usually deal with construction, but once in a while a necessary demolition job deserves special mention because of its size, the difficulties encountered, or the historical background of the structure involved. The recent removal of the Pittsburgh & West Virginia's Wabash bridge at Pittsburgh qualifies for such attention on all three counts. How the work was done, by the railroad and the American Bridge Company, is both described and illustrated in an article which starts on page 42.

HIGHER PASSENGER FARES? Our News section includes a report of the petition filed with the I.C.C. on June 3 by Eastern railroads (with one exception) asking for a 12.5 per cent increase in basic passenger fares. The petition includes a detailed list of cost increases incurred since the present fares became effective last July.

NEW "NEW ENGLAND STATES": On June 9 the New York Central put into service between Boston and Chicago, at a cost of some $4,000,000, two completely re-equipped "New England States"—soon to be consolidated with the all-coach "Paul Reveres." Pictures of the Budd-built, all-stainless steel cars appear on page 47.

MEDDLING VS. INDIFFERENCE: Congress, and also, generally speaking, railroad regulatory authorities, have shown a constantly increasing desire to meddle with railroad safety—which has steadily improved for many years. Conversely, they have shown a constantly increasing indifference to the railroads' financial welfare—which has been deteriorating just as steadily as safety has been improving. This desire to meddle with something that is getting better and better—and the utter indifference to something that is getting worse and worse—has never been better exemplified than in two bills now pending in Congress. The nature and inevitable effects of these two bills are the subject of this week's leading editorial.

CAR HIRE, DEMURRAGE, STORAGE: Last week in Washington the I.C.C. held hearings on the procedural agreement filed under the Bulwinkle-Reed Act by railroads participating in car-hire, demurrage and storage rules administered through the A.A.R. Evidence presented at these hearings by railroad officers is reported in the News pages, as is the Department of Justice's customary opposition to anything that may help the railroads.

FRANKLIN SUCCEEDS CLEMENT ON P.R.R.: The directors of the Pennsylvania, on June 8, elected Walter S. Franklin, executive vice-president, as president of the company, to succeed M. W. Clement, who in turn was elected chairman of the board—the first man ever to hold that position on the P.R.R. As related on page 48, where the careers of both men are reviewed, the changes become effective June 16.

C.T.C. ON ST. L.-S.F.: An illustrated feature article beginning on page 36 tells how centralized traffic control on 75 mi. of single-track main line between Afton, Okla., and Tulsa has enabled the St. Louis-San Francisco to eliminate nine sidings, increase tonnage ratings, reduce freight-train time and lift yard limit territories.

HOW TO STAY IN BUSINESS: Ways and means of providing better service at lower cost—two absolute "musts" if the railroads are going to remain in the transportation business under private ownership—keynoted the discussions and committee reports at the recent—and largest—annual meeting of the A.A.R.'s Freight Station Section. A full account of the meeting begins on page 50.

STILL SPENDING: Our monthly summary of railroad purchases (page 45) shows that railroads are still buying heavily—contributing in a large degree to the prosperity and welfare of many other industries. For the first three months of 1949, in fact, their total purchases topped half a billion, which is still a lot of money to anyone except a politician thinking of ways to spend other people's dough. Fuel buying was down, in line with the reduction in traffic, as were equipment purchases, but rail, ties and other materials were acquired in larger dollar volume this year than last.

that inspector really gets around!

—and he gets around in comfort and safety in his cab-shielded Fairbanks-Morse motor car. Here's an easy-to-handle car that's ideal for inspection service, for track patrolmen, linemen and supervisors. There's ample room for two men and their equipment, and the compactness and simplicity are preferred by old hands on rails the country over. Fairbanks, Morse & Co., Chicago 5, Ill.

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Telling the Railroads How to Spend Money They Haven't Got

It used to be said that "the only good Indian is a dead Indian"—and there seem to be a lot of political minds who believe that the most practical way to prevent accidents on the railroads is to strangle the life out of the industry with regulatory red tape. Right now, Congress is considering two bills — H.R.378 in the House and S.238 in the Senate — which, in their actual effect, would go a long way toward halting railroad operations in order to make them safer.

Ostensibly these two bills have as their purpose the granting of power to the Interstate Commerce Commission to prescribe practically any rules and regulations it can think of to say how trains must be operated, plus the right to call for the installation of communication or signaling systems of any or all varieties—radio, telephone, and kindred devices—whenever the whim may move the regulators, and however badly the railroads may need the money for improvements for which there is a much greater public demand. The language of the proposed law is so comprehensive that it would permit the commission, if so inclined, to order the installation of a sending and receiving radio phone on every hand car.

In non-regulated industries, the choice among improvements to which available funds will be assigned is left to the discretion of management—which, presumably, should know better than some Washington bureaucrat, however earnest his intentions, as to how to spend a thousand dollars (or a million) in order to get the maximum return in improved service for an industry's customers. On the elaborately regulated railroads, though, the assumption—quite unsubstantiated of course—is that management knows practically nothing about what is good for its customers, its employees, and even the owners of the property. So it is that the questions which management is permitted to decide (and which ought thus to get different answers from railroad to railroad as local conditions vary) are constantly reduced. Instead, most of the decisions which in other industry are left for management to make are, on the railroads, prescribed by inflexible law and regulatory decrees, which now fill a large book that gets bigger and bigger every year.

A Process Which Injures Everybody

The result is that the railroads are prevented from making changes in their practices to meet changing competitive conditions, and thus they lose traffic to less regulated or unregulated competitors. They are arbitrarily forced to spend their limited funds for unproductive purposes when there is a crying need for investment which would contribute to local needs for improved service. This process injures everybody—the patrons of the railroads, their owners,

and railroad employees who lose their jobs when traffic is diverted to less-regulated agencies of transportation. No industry kept in such an elaborate and constantly growing regulatory straight-jacket as the railroads can possibly be as responsive to the widely varying demands of its customers as those industries where such decisions are left to management which is in close touch with patron's needs.

The application of all this regulatory impedimenta upon the railroads has brought on progressive stiffening of the financial joints, a creeping arthritis—which accounts for the fact that in 1948, when industry as a whole earned 14 per cent on its book net assets, the railroads earned only 5.4 per cent on such assets and only 4.4 per cent on property investment after depreciation.

Meddling vs. Indifference

Congress and the regulators of the railroads have shown a constantly increasing desire to meddle with the safety of railroad operations, which has steadily improved over the years. They have shown an equally persistent indifference to the steady *decline* in the railroads' financial status—i.e., their ability to attract investment capital needed for rehabilitation and improvements. Back in 1916, for example, almost 9,500 people were killed and some 67,000 were injured in accidents connected with the operation of trains, and—despite the great subsequent increase in traffic and population (i.e., greater "exposure" to accidents)—fatalities had by 1947 been reduced to less than 4,000 and injuries to 29,000. Back in 1916 railroad stocks at their high for the year on the Dow-Jones average sold at prices 6 per cent *above* the average high for industrial stocks. In 1949 the high of railroad stocks is 70 per cent *below* that of the industrials.

The average price of railroad stocks fell below that of the industrials in 1921 and has been below it ever since, by a margin that tends constantly to increase. The readiness of investors to supply funds for maintaining and improving railroad property has wilted to a degree paralleling the decline in the price of railroad stocks. In the decade ended 1930 the railroad industry was able to expend an average of $411 million annually on improvements to its fixed properties. In the decade ended 1940 such expenditures shriveled to only $146 million annually. In the eight years since 1940, despite the tremendous increase in the general price level and in the demand for railroad service, the industry has been able to lay out an average of only $240 million a year on fixed plant improvements. When recognition is given to the increase in the price level, it is evident that improvements to railroad fixed property—in physical terms—have increased little if any over the outlays made in the depressed Thirties. With rolling equipment, of course, the picture is much brighter—because such equipment is financed independently of railroad mortgages and is less dependent upon the industry's general credit position.

In essence, what is happening is that railroad plant, aside from rolling stock, is not getting sufficient sustenance to enable it to keep pace with the country's growing need for improved railroad service. By invading the railroads with regulation as it has, the federal government has acquired—but so far has neglected to exercise—responsibility for the railroads' financial health, proportionate to the degree to which it has prevented management from maintaining the railroads' standing in the esteem of investors. The railroads' credit has now practically vanished, as far as fixed property improvements are concerned. The only money the railroads can lay their hands on for such improvements is that provided from their meager earnings—and yet we have the spectacle of Congress giving serious consideration to piling yet more costly and arbitrary burdens on the railroads, while continuing to give no thought to their inability, already, to finance improvements that the railroads and everyone else recognize as highly desirable.

The fact is that, despite all the handicaps they have to face, the railroads are making rapid and extensive progress in the application of improved communications, without need of any spur from Congress or the Interstate Commerce Commission. What they do need from the government in order to increase these and other improvements is not an order compelling them to spend more money for this or that particular device, but a chance to earn more money so that they may have more to spend, not only for all varieties of safety appliances, but for a wide range of improvements to all phases of their property and service. In fact, the proposed legislation may discourage rather than promote expenditures for communications devices, because it contains a clause which would forbid the railroads, once such a system is installed, from removing it without regulatory permission. A more effective means of cooling off zeal for experimental installations could scarcely be imagined.

MORE ATTRACTIVE BRIDGES

The changing concept during the past decade or more in the design and construction of railway bridges — giving increased attention to pleasing architectural lines — was appropriately recognized and rewarded during the past month when two railway bridges were ceremoniously cited as the outstanding steel structures in their respective classes in the years in which they were built; and their owners, designers and builders were awarded certifi-

cates in recognition thereof. One of these bridges was the 1,390-ft. Pecos River bridge of the Southern Pacific in west Texas—built in 1944—which has a maximum height of about 300 ft. above stream bed, and the second was the Harry S. Truman bridge of the Rock Island and Milwaukee—built in 1945—a 2,536-ft., low-level structure over the Missouri river at Kansas City, Mo., with a 420-ft. vertical-lift span. Awards in connection with both of these bridges were made by the American Institute of Steel Construction during the week of May 23, one at the bridge site in Texas and the other in Chicago.

To call attention to the distinction achieved by these two bridges is not to cast reflection on other railway structures built through the years which have not been so acclaimed. On the contrary, many noteworthy railway bridges throughout the country are among the nation's most noteworthy structures—beginning with the handsome masonry arch river crossings built during the early days of railroading and down to the Santa Fe's Colorado River bridge at Topock, Ariz., and its Canyon Diablo bridge, also in Arizona. Both of these Santa Fe bridges, incidentally, were given honorable mention by the A.I.S.C. as among the outstanding steel bridges constructed in 1945 and 1947, respectively. Anyhow, a commendable change in attitude has taken place toward railway bridge design generally; and appearance counts among the first considerations, rather than last or not at all.

Perhaps it can be said that the newer concept in bridge architecture started in the design of grade crossing separation projects, where appearance is so often an important consideration. But whatever the origin of the trend, it is evident that the early indifference of many railway engineers to the appearance of their bridges has largely given way to an appreciation of the fact that pleasing appearance has great value in winning friends for the sponsors. It is also becoming increasingly evident that, in its modern sense, architectural beauty is not incompatible with economical design, and, in many instances may promote more economical maintenance.

The entire system of inland waterways made commercially feasible by government expenditures for preparation and maintenance are not economically justified. It costs more to prepare and maintain most rivers for navigation than would be the expense of building and maintaining a railroad. All costs considered, including the hidden cost the general taxpayers bear, inland waterway transportation on the average is not as cheap as rail transportation. Its largest use is by private enterprise for profit and the benefits do not pass to the consumers in lower freight rates. The railroads are under effective regulation as to rates and services. To make them also compete with government-subsidized carriers is unsound in theory and practice.
—*J. B. Hill, president, Louisville & Nashville.*

BETTER CROSSING PROTECTION IN TOWNS

Greatly increased safety to drivers of highway motor vehicles can be achieved in numerous towns by cooperation of state, city and railroad representatives in planning and installing improved forms of protection. Towns have, more often than not, developed and expanded on both sides of a railroad, with grade crossings over the tracks at each block, causing a multiplicity of unnecessary hazards.

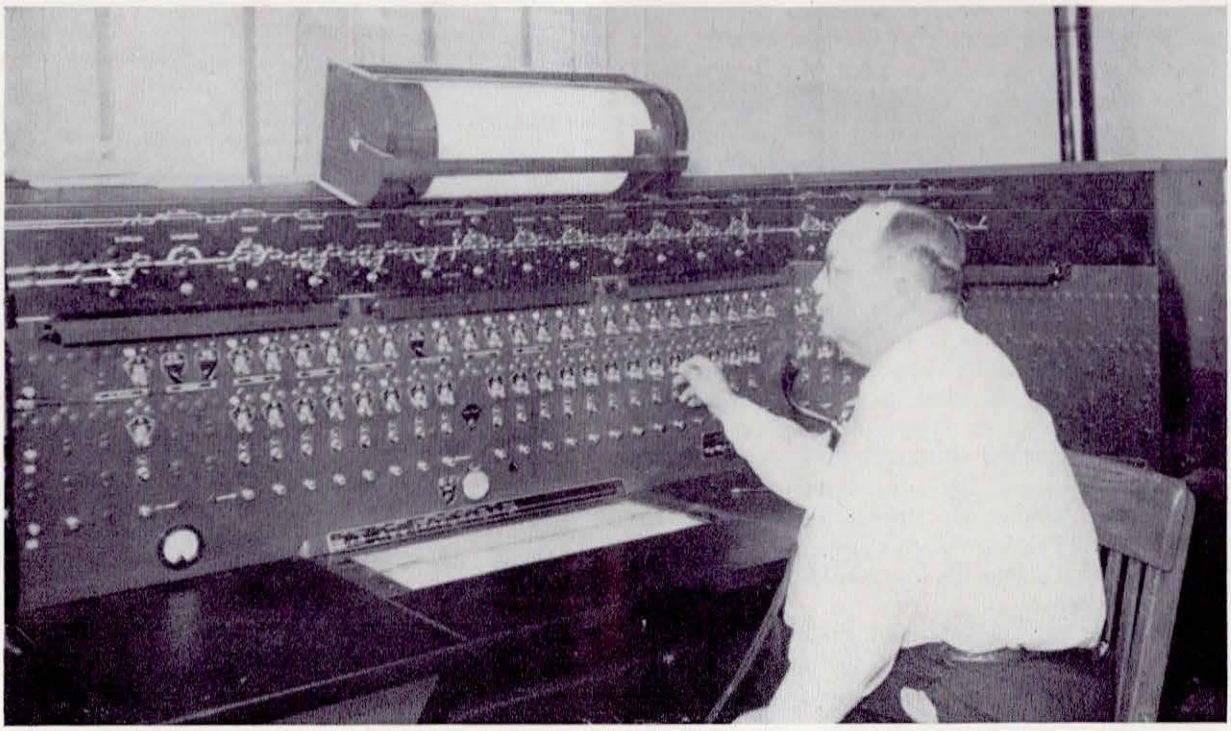
As street traffic has increased, various forms of protection have been installed at the different crossings, such as fixed signs, bells, watchmen, signals and gates. In some cases, the protection by watchmen or manually operated gates is not in service the full 24 hr. every day. As a result of such situations, every so often an accident occurs, and irrespective of who is negligent, the railroad may be required to employ more watchmen and to reduce train speeds drastically.

One certain preventive—which, to be sure, is often impracticable and unnecessarily expensive—is for the railroad, in cooperation with local and state authorities, to install uniform, automatically controlled, combined signal and gate protection at every crossing through the town. An equally effective, and much more practical and economical plan would be to install such uniform protection at only the more important crossings, closing those crossings that are but little used.

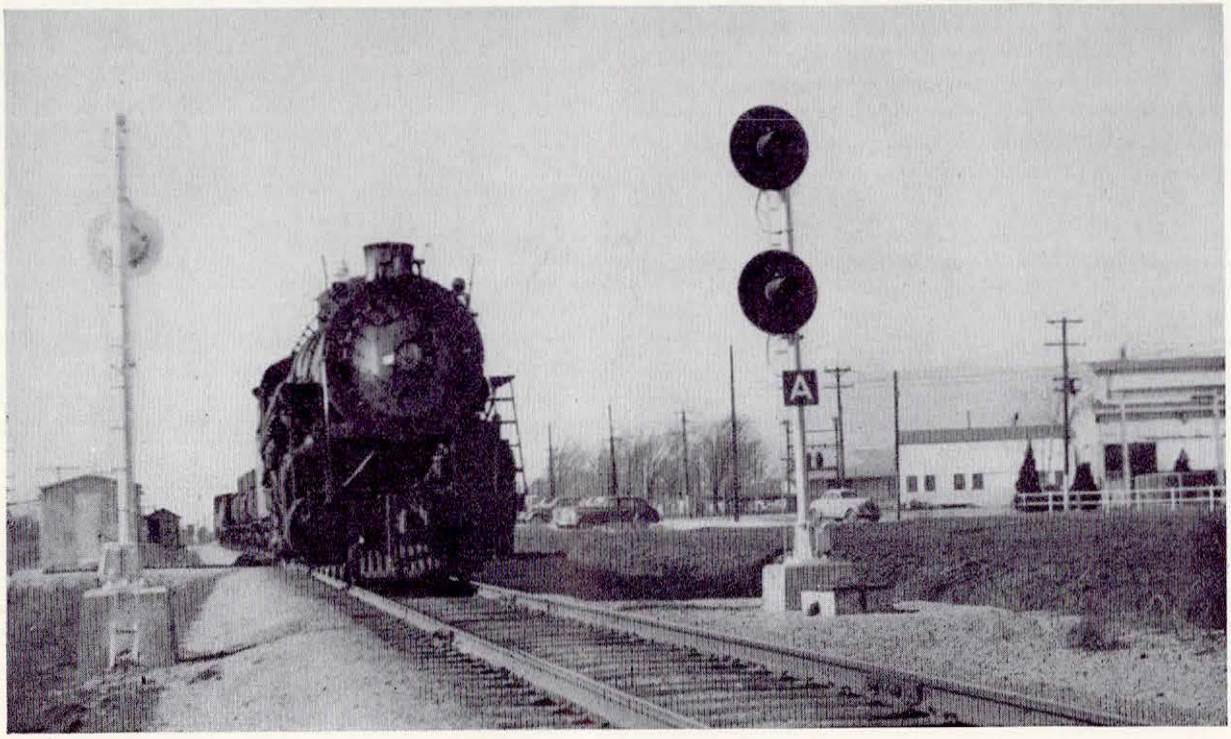
Such a plan of crossing protection was adopted in Mishawaka, Ind., in 1948, where there were 30 crossings of streets at grade with a double-track main line of the New York Central. Standard crossbuck signs were in service at seven of these crossings; flashing-light signals at eight crossings, with additional protection by watchmen part time at two of them; and mechanical gates with watchmen at four other crossings. The remainder were protected by bells or watchmen on duty certain hours each day. Representatives of the city, the State Highway Commission of Indiana, and the U. S. Public Roads Administration cooperated in a plan to close 10 of the 30 crossings, and to install flashing-light signals with short-arm gates at all of the 20 remaining crossings. The State Highway Commission of Indiana paid a substantial portion of the cost involved in this project.

This installation has now been in service more than a year and has demonstrated not only that many little-used crossings can be closed without undue inconvenience to the public, but also that the uniform type of protection at all crossings—in service full 24 hr. every day—affords improved safety and obviates the necessity for drastic reductions in train speeds.

C. T. C. SAVES



Above—The C.T.C. between East Tulsa and Afton is controlled by a machine in the dispatcher's office at Tulsa. Below—Eastbound freight train passing over the No. 20 equilateral turnout at East Tulsa



TRAIN TIME ON FRISCO

Project on 75-mi. main line eliminates nine of 21 sidings; expedites freight trains one hour or more; and cuts delays in former yard limit territories

By installing centralized traffic control on 75 mi. of single track between Afton, Okla., and Tulsa, the St. Louis-San Francisco has been able to eliminate 9 of 21 sidings, increase tonnage ratings, reduce freight train time 1 hr. or more and lift yard limit territories. At Afton, the east end of the new C.T.C., two important lines diverge; one eastwardly through Monett, Mo., and Springfield to St. Louis; and the second northward through Fort Scott, Kan., to Kansas City, Mo. There are two main tracks between East Tulsa and Sapulpa, Okla., 13.7 mi., and then from Sapulpa two lines diverge, one westward to Oklahoma City, and the other southward to Dallas and Fort Worth. Thus, the traffic to and from two lines at both ends must be handled over the one single track between Afton and East Tulsa.

From 30 to 35 Trains a Day

Four passenger trains and four scheduled freight trains, in each direction, are operated daily between Afton and Tulsa. About eight extra freight trains are operated daily, and two local freight trains run daily except Sunday. In addition, one through passenger train each way, operated jointly with the Missouri-Kansas-Texas, uses the 11.6 mi. of the Frisco between Afton and Vinita, Okla., as well as the line between Afton and St. Louis. Thus, the total number of trains on the Afton-Tulsa section is about 30 to 35 daily. The difficulties of operating trains with minimum delays are increased because they are bunched in certain periods. For example, nine trains, three passenger and six freight, must be handled during the early morning hours.

The C.T.C. control machine is in the dispatcher's office at Tulsa. The track diagram has lamps which are lighted in the conventional manner to indicate the locations of trains.

Characteristics of Line

Between Afton and Tulsa, the railroad traverses prairie, with rolling grades ranging up to a maximum of about 1 per cent. The curves are few and most of them are 2-deg. or less, although there are one 3-deg. and two 5-deg. curves at Garnett. For the most part, therefore, the grades and curves do not hinder train operations. Speeds are limited to 70 m.p.h. for passenger trains; 50 m.p.h. for steam freights; and 55 m.p.h. for Diesel freights. Trains pulled by steam locomotives handle up to about 3,500 tons, and by Diesel locomotives up to about 5,000 tons. Semaphore automatic block signaling was previously in service on this territory, and the passing track switches were operated by hand-throw stands with spring switches at 11 sidings.

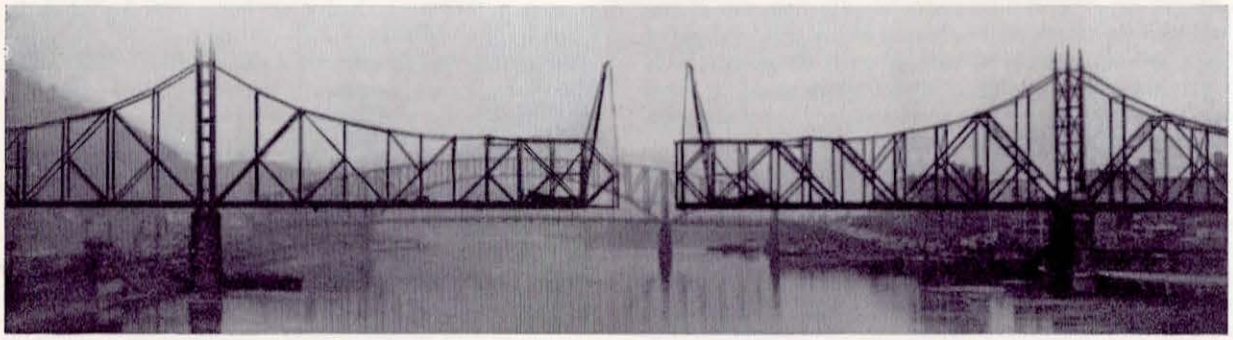
Experience with previous installations on the Frisco indicated that the number of sidings could be decreased when installing centralized traffic control. Formerly, there were 21 sidings between Afton and East Tulsa. Five sidings were removed, namely, at Cort, Nemo, Sunsweet, Howard and Salsman, as shown on the map. Short sidings at Foyil, Claremore, Garnett, Dawson and Bomber, no longer needed for regular service to meet or pass trains, were left in place, with hand-throw switches. This left only 11 of the original 21 sidings to be equipped with power switches and C.T.C.-controlled signals. Several of these sidings were lengthened so that the capacities of nine sidings now range from 106 to 155 cars, and the other two are 91-car and 98-car.

New No. 15 turnouts with 22-ft. points were installed at both ends of these 11 sidings so that trains can enter and depart at speeds up to 25 m.p.h. At the end of double track at East Tulsa, a new No. 20 equilateral turnout was installed, permitting train movements in either direction at 50 m.p.h. The new power switch machine and signals at this location are part of the C.T.C. At Afton the C.T.C. includes power switch machines at the junction switch and two switches leading from other tracks, as well as the east switch of a new 127-car siding extending from Vinita to Kahoga on the line toward St. Louis. Thus, in all, the C.T.C. includes 26 power switches with C.T.C. controlled signals.

Train Time Saved

The centralized traffic control is the means of saving considerable train time, and also of increasing the tonnage handled by some freight trains. Previously train movements were authorized by timetable and train orders. Now the siding switches are equipped with power machines, and the dispatcher operates these machines, as well as the signals at these switches, to control train movements on a minute-to-minute basis, so that meets can be made on close time.

Under the former operating procedure, a freight



PITTSBURGH LANDMARK COMES DOWN

Wabash bridge of the Pittsburgh & West Virginia, for 44 years a symbol of George Gould's invasion of the city, dismantled after falling into disuse following destruction of terminal facilities by fire

The Wabash bridge of the Pittsburgh & West Virginia, a 1,504-ft. double-track cantilever structure spanning the Monongahela river at Pittsburgh, Pa., and for 44 years a landmark in that city, recently was completely dismantled after having been rendered useless by a fire in 1946 which destroyed the freight terminal that it served. The bridge, once the second largest cantilever structure in the world, was also a symbol of George Gould's costly, but unsuccessful, invasion of Pittsburgh in an attempt to compete with the Pennsylvania for the large freight tonnage originating in the Pittsburgh district.

The Gould Venture Unsuccessful

The dismantling of the bridge was carried out by the same company that built it—the American Bridge Company, Pittsburgh, a subsidiary of the United States Steel Corporation. Erection of the bridge required three years ending with 1904. By contrast, the dismantling work, in which modern steel travelers and flame-cutting methods were employed, required only five months.

The Wabash bridge came into being when Gould constructed the Wabash Pittsburgh Terminal—a 60-mi. line from Pittsburgh Jct., Ohio, near Cadiz, on the Gould-controlled Wheeling & Lake Erie, to Pittsburgh. In entering the city, this line tunneled through Mount Washington, directly west of the river, then crossed the bridge and its approaches and terminated in an elevated stub-end passenger terminal in the heart of the downtown district.

The Wabash Pittsburgh Terminal did not prove to be profitable and the line was acquired by the Pittsburgh & West Virginia in 1917. Passenger service into the downtown terminal was discontinued in 1931 and the balloon-type passenger train shed was not used after that date. The Pittsburgh terminal also included a three-story freight station and warehouse, while beneath the elevated tracks of the train shed were located warehouses and various retail and wholesale establishments. This facility was almost completely destroyed by fire in 1946, and since that time the bridge has been out of service.

The Wabash bridge was 1,504 ft. in length, consist-

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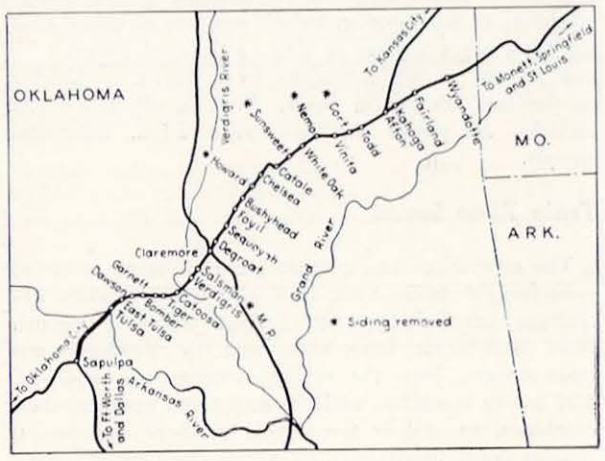
Under the former operating procedure, a freight

New No. 15 turnouts, permitting train speeds up to 25 m.p.h., were installed at the power-operated sidings

train was required to be in the clear on a siding at least 5 min. prior to the time of a passenger or other superior train. This time is now reduced by making close meets, the timing being so close in many instances that neither train stops. For example, on February 7, east bound freight train No. 30, with 95 cars, went through three sidings non-stop, at Degroat, Chelsea and Whiteoak, to meet one passenger and two freight trains which likewise did not stop.

The power switch machines, under the control of the dispatcher, eliminate the stops formerly required when trainmen operated the hand-throw stands for trains to enter and leave siding. The dispatcher finds that a long freight saves 8 to 10 min. when leaving a siding, and perhaps 4 to 5 min. when entering, depending on the local grades. Formerly trains had difficulty in using some of the sidings, and the elimination of stops when entering and leaving has permitted an increase from 2,900 tons to 3,500 tons in the tonnage handled by some locomotives. All through freight trains are now making the run in either direction between Afton and Tulsa in an average of about 2 hr. 45 min., as compared with 3 hr. 45 min. previously for fast freights, and 4 hr. 30 min. for slower ones. Time is saved in two ways: (1) by closer meets, and (2) by the facility with which trains enter and depart from sidings.



Sidings were removed at five points in the C.T.C. territory between Afton and East Tulsa

The dispatcher also has found that the time spent by trains waiting in the yards, after they are ready to leave, is reduced because with C.T.C. a freight can be run on close time ahead of a passenger train. For example, on February 3, an eastbound freight train departed from Tulsa at 1:25 p.m., only 35 min. ahead of the "Firefly" passenger train. With the previous timetable and train-order operation, the freight would have been held at Tulsa, thus losing at least 35 min. On the day mentioned it was possible for the freight to run all the way to Afton ahead of the passenger train.

No Yard Limit Delays

Previously, under the requirements of Rule 93, all trains, other than first class, were required to run at reduced speeds, prepared to stop short of train or obstruction, in yard limits which extended throughout a switching and industrial area from East Tulsa eastward to Rice, about 4.5 mi. Compliance with this rule not only handicapped the work of the switching crew which served these industries, but also slowed down the through freights. After the C.T.C. was installed the yard limit boards were removed and, therefore, Rule 93 does not apply. Under C.T.C. operation, the dispatcher can authorize the switching crew to make moves on the main track as required, but when the switcher is in the clear and locked on some spur, the through trains are authorized by signal indication to operate at maximum permissible speed, with safety, because the switching crew cannot open a switch or foul the main track.

This C.T.C. project was planned and installed by signal forces of the St. Louis-San Francisco, under the direction of R. W. Troth, superintendent of communications and signals, the major items of signaling equipment being furnished by the Union Switch & Signal Co.

WHY FREIGHT CLAIMS REMAIN HIGH

A review of the progress that has been made in reducing freight claims and what still remains to be done

By A. L. GREEN
Senior Special Representative
Freight Claim Division
Association of American Railroads

For the year 1948, the charge to operating expense for freight loss and damage was $135,390,664 for United States and Canadian railroads, an increase of 10.8 per cent compared with 1947. Because of the time lag between claim presentations and payments and the period in which the traffic moved on which the claims were filed, it is impossible to determine what the claim loss was on traffic originated in 1948. A very high percentage of claims paid in the first quarter of 1948 was on 1947 traffic, and in the forepart of 1949 most of the claims are on 1948 traffic. In fact, a survey of railroads made recently indicated that only about 38 per cent of the amount charged out in 1948 was on 1948 business, the remainder being on prior business, mostly 1947.

At a glance it might seem that the "hot war" against loss and damage should have been a lot hotter—that shippers, receivers, boxmakers and railroads have been losing the fight. Quite to the contrary, not in years has the promise of improvement been as encouraging. During 1948, with the second greatest peacetime traffic, about 17 per cent or a million fewer claims were filed with the railroads. Capitalizing those claims at the average amount per claim, that was a clear gain of about $25,000,000.

Fewer Claims Unsettled

Then there was another accomplishment that bears importantly on predictions. Claims unpaid, pending with the railroads at the close of 1947, numbered 727,025. By the end of 1948, that backlog had been reduced by 31 per cent to 499,466 claims. In other words, the number of claims on hand, unsettled, had been reduced by 227,559 claims. That clean-up obviously distorted and abnormally increased the 1948 payment.

There was another condition that had the same effect. In furtherance of the policy of railroads to employ every practical means to expedite the payment of claims—to maintain the best possible relations with the shipping public—in cases when liability to claimant is determined by the evidence presented and by railroad records verifying the loss or damage claimed the claims are paid immediately without making the claimant wait for his money until interline records can be obtained on which claims are distributed among the carriers involved. When such claims are paid they are kept temporarily in a suspense account until they can be finally charged out. In January, 1948, paid claims in the suspense account totaled $28,722,398. By the close of the year that had been reduced by $5,873,105 to $22,849,293. As these claims this year are transferred to operating expenses, the 1949 claim figure is bound to be increased accordingly.

Other factors which are favorable to a better claim experience are the slow but steady decline in the price level, which means a lower average claim this year; a better attitude toward the job on the part of supervisors and employees in factory, warehouse and transportation through training and improved employee-management relations; the largely increased use of mechanical equipment for the handling of freight, at less handling cost and less risk of damage; improved quality of shipping containers, now in plentiful supply; and the much better average freight car—the keystone to good transportation from the loss prevention standpoint—compared to the average car in service a few years ago.

A great many old cars have been completely rebuilt or replaced by new cars of improved, modern design, which means that good floors, walls, doorposts, and so on, will greatly reduce the damage hazard existing in old, worn-out equipment. No doubt much damage to fragile commodities has been chargeable to rough-riding cars, as well as to under-maintained draft gears that permit too much switching shock to reach lading. New, improved draft gears that cushion so much more of the shock, and longer travel springs cooperating with snubbers, and the more scientifically designed trucks that take so much of the vertical bounce or roughness out of the ride, all will contribute to a safer ride for freight, as well as lengthen the service life of cars and reduce maintenance costs.

Mechanical Department's Part

A few claim statistics should give a fair idea of the mechanical department's responsibility for claim payments. First, there are the claims paid because the inspection showed the loss or damage was clearly due to the defective or unfit condition of the car. Those claims came to $6,994,089 in 1948, or 5.2 per cent of all claims. Of that amount leakage or damage of grain cost $2,643,087; coal and coke losses, $1,392,328; sugar,

This is an abstract of a paper presented at a meeting of the Chicago Car Foremen's Association, May 9.

REPORTED CAUSES OF DAMAGE CONSIDERED PRIMARILY UNDER RAILROADS' CONTROL

Item No.	Cause of damage	Number of boxes reported damaged	Per cent of total railroad responsibility
3.	Nails, wire, boards, straps, not removed	634	23.8
4.	Dirty car	8	0.3
12.	Leaky car	499	18.8
13.	Broken car walls	25	0.9
14.	Broken floor or floor racks	157	5.9
15.	Rough handling in transit	1,339	50.3
	Totals	2,662	100.00%
	Percent of total damage reported	34.0	

$229,383. Refrigeration, ventilation, freezing or heater failures, in which the condition of the car could have played a part, cost about $2,000,000 in claims. Other losses, no doubt partly chargeable to the condition of cars, although not definitely identified, were the so-called "unlocated losses" of grain, $3,881,911, and coal and coke, $1,002,623. Train accidents, besides the injury and total loss of equipment, cost $4,926,610 or 3.6 per cent of all claims, and this wastage, too, in part resulted from failure to inspect, repair and maintain equipment in good condition.

Nor is this all. Freight in packages was damaged to the extent of $57,537,972, and freight not packaged suffered damages of $13,506,104. The true causes of this damage were not reported primarily because so much freight is unloaded by consignees who usually record only the extent and cost of the damage, not the cause. We dare not venture even a rough estimate of the proportion of this damage, amounting to more than $70,000,000, resulting partly or wholly, directly or indirectly, from failure to make an adequately thorough inspection of cars; from furnishing Class B or C cars for loading of Class A commodities; from reloading clearly unfit cars without inspection by carrier; from keeping cars in service that long ago should have been sent to the "bone yard" or completely rebuilt; and from neglected draft gear, snubber and spring maintenance.

Some of the guesswork on how many claim dollars might have been saved by the mechanical department was taken out by a comprehensive survey of the causes of damage to goods shipped in fiberboard boxes which was conducted by the Shipping Container Institute. This organization was formed by fiber box interests to find out how much damage in shipping is chargeable to failure of that type of package, or to other conditions not connected with the protective quality of the fiber box. A well-informed box man, in reviewing this study, refers to previous failures to get the facts, and says:

"In the work to date it has been found that approximately 0.9 per cent of the 733,308 boxes shipped, that were individually inspected at destination, were damaged in some way during shipment. Of this total, approximately 0.2 per cent were damaged sufficiently to cause the consignees to file claims for damage with the railroads. The data developed by this study have been further broken down to show the causes of damage which are considered to be primarily the responsibility of, or at least under a certain degree of control by, the three groups concerned, namely the boxmakers, shippers and railroads." (Those categories for which the railroads are considered responsible are detailed in the accompanying table.)

Car Interiors Need Care

We do not accept all the conclusions reached by these investigations, but we do know that a great amount of damage to commodities in bags and boxes is caused by rubbing, shifting and snagging against rough places in the car—bad walls, floors, or door posts; broken or uneven floor racks; or parts of bracing material such as strap, anchor plates, or blocks, left in cars.

Not all shippers appreciate that nothing can be loaded so tightly in place that the load will not give, shift or slide a little when the car is in motion, or from sudden starts and stops in switching. If this were better understood perhaps more attention would be paid to the preparation of cars for loading. Canned goods are an example. When the cases are loaded on rough, broken or uneven floor racks, those cases are held firmly in place while the rest of the load is free to shift when the car is switched. Often damage in a single car, amounting to several hundred dollars, can be traced to the snagging of the floor cases and tilting of the whole load because all the cases could not move in unison.

Point number one I would like to make is this: Pay a lot of attention to floor racks in refrigerator cars. Keep them in good repair—smooth and level. By doing so, freight damage costing far more than maintenance of racks can be prevented. And the car man will cultivate the good will of important shippers for his railroad. Weak floors, broken floor boards, worn rough floors, bits of blocking or strap left on car floors all contribute to damage that need not occur. Some carload receivers are now making it a practice to remove all bracing, strap and anchor plates as fast as unloading advances, as a safety measure, to reduce personal injuries to the men unloading the car. Certainly no one will get a painful poke in the eye from a jagged piece of strap that has already been removed. Nor will a man run a nail in his foot if it is pulled when the cleating is taken out. There is a patented bar with a strong ratchet head now available at low cost which is good for removing strap ends and anchor plates. Clean cars are a great help.

Lift Trucks Tax Floors

An alert car inspector has a lot to keep in mind. For example, he must consider whether the floors in cars placed for loading commodities of heavy weight densities will support heavy lift-truck equipment. Many reports have come in that the wheels of lift trucks have dropped through the floors of cars, both old and new. I don't know enough about floor construction to suggest what could be done to avoid or lessen such occurrences, but it may be that inspectors can "outlaw" certain cars with known weak floors for roll paper, pig metal, heavy machinery and similar articles for which extra heavy handling equipment is used.

Claims paid for loss and damage of machinery last year amounted to $3,114,764, in large part due to improperly applied crating or bracing. Although probably most regular shippers of new machinery have become

expert in preparing their products for safe transportation, many if not most railroads have instructions in effect that before releasing a carload of machinery or signing the bill of lading for it, a car inspector must see that the bracing, blocking or snubbing against too free movement has been properly done, so that with normal handling the shipment will carry without damage.

It is especially important that a competent loading inspection be made of second-hand or "war assets" machinery, as too often there is a temptation to neglect the bracing of used machines. When broken, however, they at once become extremely valuable and the railroad is at a disadvantage in adjusting the claim. And less-than-carload machinery shipments accounted for a claim-cost of $1,327,430. Even if its proper loading is the responsibility of the freight agent, a good car inspector can be mighty handy in helping the loader to understand and apply the rules.

All told, the railroads paid $7,585,060 for loss or damage of grain, and for livestock and flour and other mill products carload claims were $3,929,117 and $4,040,347, respectively. The freight car and its servicing is no "piker" when it comes to loss and damage. If it were kept in better shape, and all inspections and repair work were always up to the best standards, the savings in avoidable claims would be up in the millions—money sorely needed for new cars, new power, better track and other plant improvements, not to mention mounting payrolls and material costs.

Actually, I do not believe we are losing much more grain by volume that we did a few years ago. In fact, a while back, I looked into this and found that the increased payments on grain and livestock were almost wholly accounted for by the large increases in the value of those products. It is this great increase in value—which incidentally brings in so many more claims for small shortages—which makes proper car inspection, preparation and maintenance so important.

Senile Springs and Draft Gear

A suggestion has been made that the car inspector should watch the condition of the striker casting behind the coupler head, and that where it gives evidence that a draft gear is not functioning arrangements should be made for repair or replacement of the gear. This is in line with the question, What are the old cars costing the railroads in the way of preventable loss and damage of lading? I shall not attempt an answer, but I do know from investigations I have made that the condition and shock-cushioning capacity of the draft gear, in conjunction with a smooth-riding freight car truck, or the proper combination of long-travel spring and snubber of good design, make a tremendous difference in the amount of damage sustained by fragile commodities.

A high percentage of new cars are being equipped with modern draft gears of good capacity, snubber springs or trucks having better ride qualities. This rather delayed recognition of the need for better control of vertical as well as horizontal shock in new cars would go a long way if applied equally to the rebuilding of the older cars, toward giving all freight a smoother and safer ride. Applied to old cars, possibly the savings in claims would more than pay for the cost of installing the best equipment—not considering the lowered cost of maintenance.

I do not want to leave the draft gear and spring question without putting further emphasis upon the importance of keeping both in good, workable condition. Many times impact registers in cars show repeated heavy shocks in various yards, and when the draft gear is dropped it is found to be defective. Fast switching goes with fast schedules, and if we are to meet competition we must maintain fast schedules. As for snubbers, we had some pretty bad experiences during the war when snubbers having about a three-year expectancy of service were still in use after six or seven years—as those cars had even less protection than is given by the ordinary A.A.R. coil nest.

Delays to freight ran up a claim bill of $7,777,000 last year. The car foreman is not solely responsible for all these "box car" figures but I can see, and my hope is that he will see, where he fits importantly into the prevention picture—right down in the bald-headed row. In Chicago Chris Nelson thought this delay problem through. He got the million-dollar idea that perishables do not have to miss conections when the car needs some repair work. He virtually wiped out perishable delays in Chicago terminals.

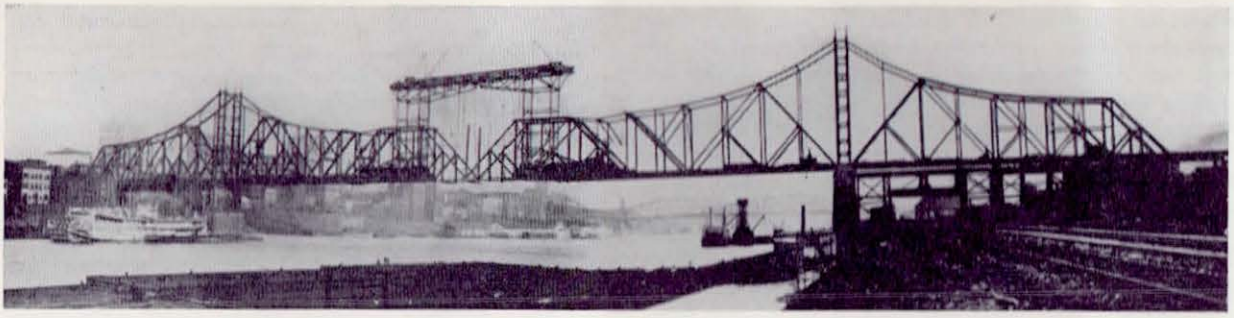
Wrecks and derailments are another chance to save money and property from destruction. The claim man has seen many instances where, after the main job of opening the line has been done, a little more thought and care might have been exercised in salvaging the freight. When transfers are necessary, experienced men can do it better. Who can handle beef like a practical meat man? By exercising a little more ingenuity, could we not do more here for the cause of prevention?

Is there a greater need on the railroads today than the need for adequate training of employees and supervisors in all departments? We have the rules governing proper car inspections and maintenance and loading of commodities on open-top and in closed cars, but unless those rules are clearly understood, they cannot be properly applied. In other words, if we used the transportation knowledge we have, a much better job of railroading would be done.

Results are good or bad in proportion to the number of well-trained men that do the work. Certainly the men in the mechanical department are not over-trained, and this is equally true of other departments having direct responsibility for loss and damage prevention. When this job is done right everybody benefits—the shipper, the receiver and the railroad. And—so extremely important just now—better railroading keeps claim money in the till where it belongs, builds good will and friendships, and enables the railroads the better to meet tough competition.

Railroads comprise the key industry of America. Government operation of our railroads would be the initial step toward socialization of all industry, and later communism. With the railroads socialized, the rest of the job would be easy. None of us wants it to happen, and the surest way to keep it from happening is to keep the railroads strong and in a position to pay their own way.

—A. T. Mercier, president, Southern Pacific, in a joint message to shippers and employees.



PITTSBURGH LANDMARK COMES DOWN

Wabash bridge of the Pittsburgh & West Virginia, for 44 years a symbol of George Gould's invasion of the city, dismantled after falling into disuse following destruction of terminal facilities by fire

The Wabash bridge of the Pittsburgh & West Virginia, a 1,504-ft. double-track cantilever structure spanning the Monongahela river at Pittsburgh, Pa., and for 44 years a landmark in that city, recently was completely dismantled after having been rendered useless by a fire in 1946 which destroyed the freight terminal that it served. The bridge, once the second largest cantilever structure in the world, was also a symbol of George Gould's costly, but unsuccessful, invasion of Pittsburgh in an attempt to compete with the Pennsylvania for the large freight tonnage originating in the Pittsburgh district.

The Gould Venture Unsuccessful

The dismantling of the bridge was carried out by the same company that built it—the American Bridge Company, Pittsburgh, a subsidiary of the United States Steel Corporation. Erection of the bridge required three years ending with 1904. By contrast, the dismantling work, in which modern steel travelers and flame-cutting methods were employed, required only five months.

The Wabash bridge came into being when Gould constructed the Wabash Pittsburgh Terminal—a 60-mi. line from Pittsburgh Jct., Ohio, near Cadiz, on the Gould-controlled Wheeling & Lake Erie, to Pittsburgh. In entering the city, this line tunneled through Mount Washington, directly west of the river, then crossed the bridge and its approaches and terminated in an elevated stub-end passenger terminal in the heart of the downtown district.

The Wabash Pittsburgh Terminal did not prove to be profitable and the line was acquired by the Pittsburgh & West Virginia in 1917. Passenger service into the downtown terminal was discontinued in 1931 and the balloon-type passenger train shed was not used after that date. The Pittsburgh terminal also included a three-story freight station and warehouse, while beneath the elevated tracks of the train shed were located warehouses and various retail and wholesale establishments. This facility was almost completely destroyed by fire in 1946, and since that time the bridge has been out of service.

The Wabash bridge was 1,504 ft. in length, consist-

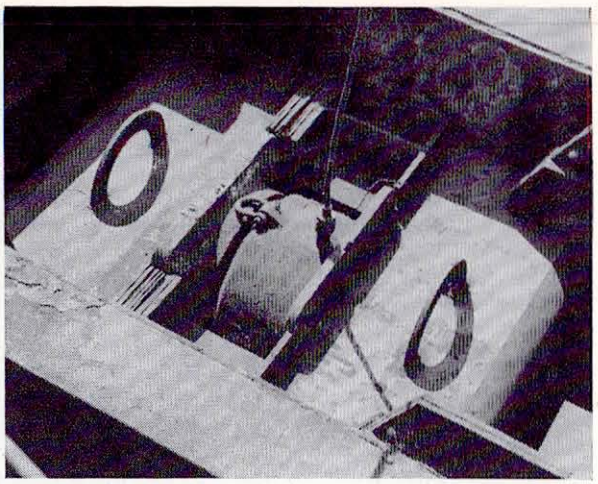
Going up in 1904—Cumbersome wooden travelers with Manila rope rigging were employed in erecting the Wabash bridge

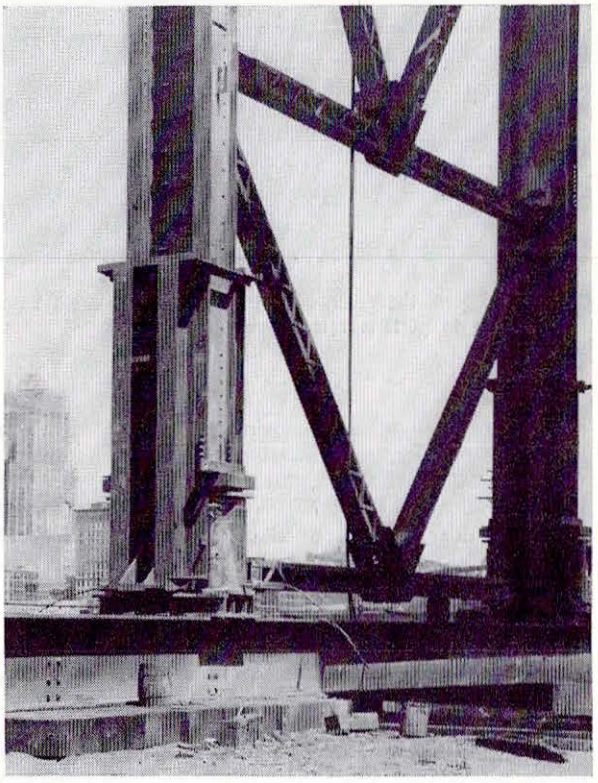
Coming down in 1948—Careful planning and modern erecting equipment made quick work of dismantling the structure, the project requiring five months. *(Photo courtesy R. H. Brown, Pittsburgh, Pa.)*

Stress-relieving jacking devices were installed in the top and bottom chords at the transition points between the cantilever arms and the suspended span. Shown here is a 500-ton hydraulic jack, placed so as to act horizontally, at one of the bottom-chord transition points

The anchor arms of the bridge were supported on steel falsework bents, as shown here, while being dismantled. Note the heavy-duty hydraulic jack at the base of each vertical

(All photos, except as noted, courtesy of United States Steel Corporation)





ing of two 340-ft. anchor arms, two 12-ft. towers, two 220-ft. cantilever arms, and a 360-ft. suspended span. Directly east of the bridge an elevated structure led to the passenger terminal, while at the west end was a 264-ft. deck-girder viaduct and a 139-ft. through-truss bridge, the latter spanning the main-line tracks of the Pennsylvania's line to St. Louis, Mo. The elevated structure east of the bridge had been removed earlier; the viaduct west of the bridge and the truss bridge were dismantled as part of the recent project.

Dismantling Procedure

The procedure followed in dismantling the bridge was in many respects identical with that used in its erection, but performed in the reverse order. The principal difference was that modern steel travelers were used instead of the cumbersome wooden travelers used in the earlier work. The travelers, two in number, consisted of stiff-leg derricks with 120-ft. booms, which were mounted on carriages arranged to move on the outside rails of the double-track system on the bridge. Each traveler weighed 85 tons.

Partial assembly of the travelers was carried out on the viaduct west of the bridge, after which they were moved to the center of the main span for final assembly. During the latter work it was necessary to remove the top lateral bracing and the sway bracing near the mid-point of this span before the 120-ft. booms of the derricks could be raised.

Stress-Relieving Plan

The engineering department of the bridge company computed the stresses for every member in the bridge and, using this information as a guide, prescribed a definite order for the removal of the individual members. This, incidentally, varied to some extent in each panel. The engineering department also devised a plan for relieving stresses in the top and bottom chord members prior to making the initial cut at the mid-point of the main span.

The stress-relieving plan called for the installation of jacking devices in both top and bottom chords at the transition point between the cantilever arms and the suspended span. The devices for the bottom chords employed 500-ton hydraulic jacks, acting horizontally against solid diaphragms inserted in the chord member just inside the end panel points on the cantilever arms. The top chord jacking devices employed 100-ton hydraulic jacks operating vertically against the pins of the eyebar system which tied the cantilever arms to the suspended span. Once the span was cut at the center, further jacking provided sufficient opening for expansion and contraction.

After the initial cut was made, the travelers backed

A group of the conventioners talking things over. Left to right, L. Mayrisch, manager freight protection and station service, Southern Pacific; J. M. Feeney, manager New York Terminal Matching Bureau; A. E. Ward, agent, Chicago, Milwaukee, St. Paul & Pacific, Galewood, Ill.; W. G. Miller, agent Pennsylvania, Polk St., Chicago

Costs and Service Get Agents' Attention

Instructive committee reports feature largely attended meeting of Freight Station Section; Allan of Canadian National next chairman

Better service and the paring of operational costs, described as the only means by which the railroads could stay in the transportation business, were the keynotes of discussion at the largest of all annual sessions of the Freight Station Section, Association of American Railroads, attended by more than 800 and held at Chicago's Congress Hotel, May 25-27. From the moment when J. L. Webb, manager of stations and motor service of the Pennsylvania, and chairman of the section, made his opening remarks, it was clear that all present were conscious of the factors which could help bring more business to the railroads. Thus, from the service angle, discussion centered on better tracing, speedier and damage-free handling, better outturn reports on cars containing damaged freight, courteous and prompt handling of shipper inquiries, and so on. The merits and demerits of various methods of materials handling, loss and damage prevention, billing and rating also were described and discussed.

The importance of the agent in the railroad picture was emphasized repeatedly, for varied reasons, for as J. P. Kiley, vice-president operations of the Chicago, Milwaukee, St. Paul & Pacific, said in his address, "Practically all the traffic, transportation, and in many instances, operating problems revolve around the station agent in one way or another." L. W. Baker, freight traffic manager, sales and service, of the Baltimore & Ohio, told the group that he considered the agents as members of the traffic department—even though generally they are classed as operating personnel—because they, the men on the "firing line," had the close relationships with the shippers, and therefore could do more than anyone else to sell what the railroads produce.

Both Mr. Baker and C. H. Longman, vice-president operation of the Chicago & North Western, said that the agent was one man in the local community who could see the growth of socialism in that community—including the subsidization of the railroads' competitors—and was in a position to do something about it. Mr. Longman went into detail about how the trucks were breaking up the highways, and urged the agents to fight further subsidization. He went on to say that increasing socialism, plus increased railroad costs, were the main factors which have forced the railroads to raise their rates to the point where the truck lines can compete effectively with the railroads. As a result, Mr. Longman said, while the ratio of station platform men to truckers was 50-50 a few years ago, today there are 80 truckers for every 20 station platform men, and a substantial part of the more profitable business has gone to the trucks.

Loss and Damage

Although all of the speakers touched on the service question, Mr. Baker was especially specific, since he described in some detail the B. & O.'s "Sentinel Service," as one example of what could be done, and how, to improve service. Irving M. Peters, general traffic man-

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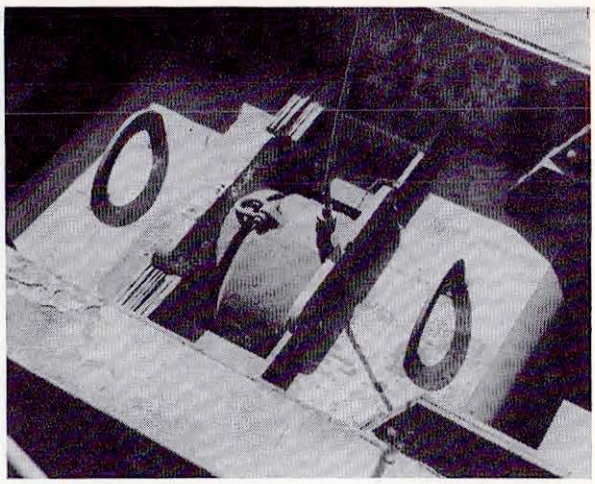

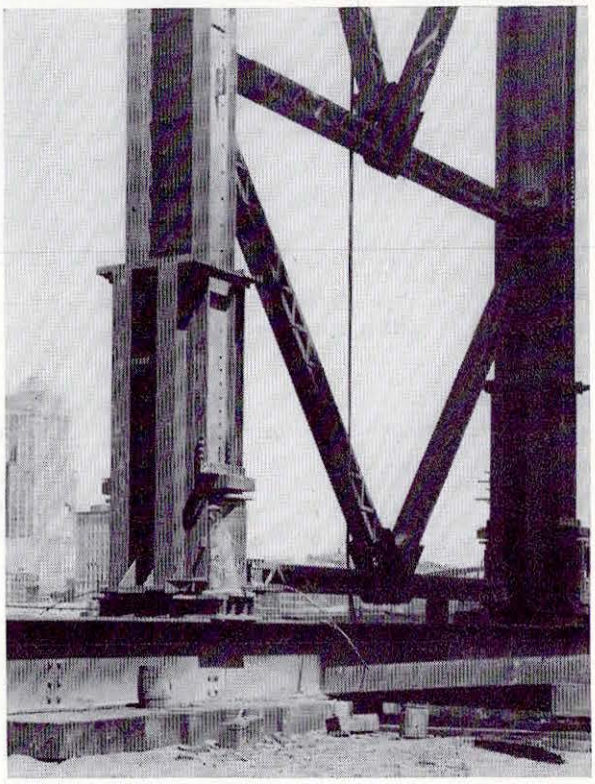

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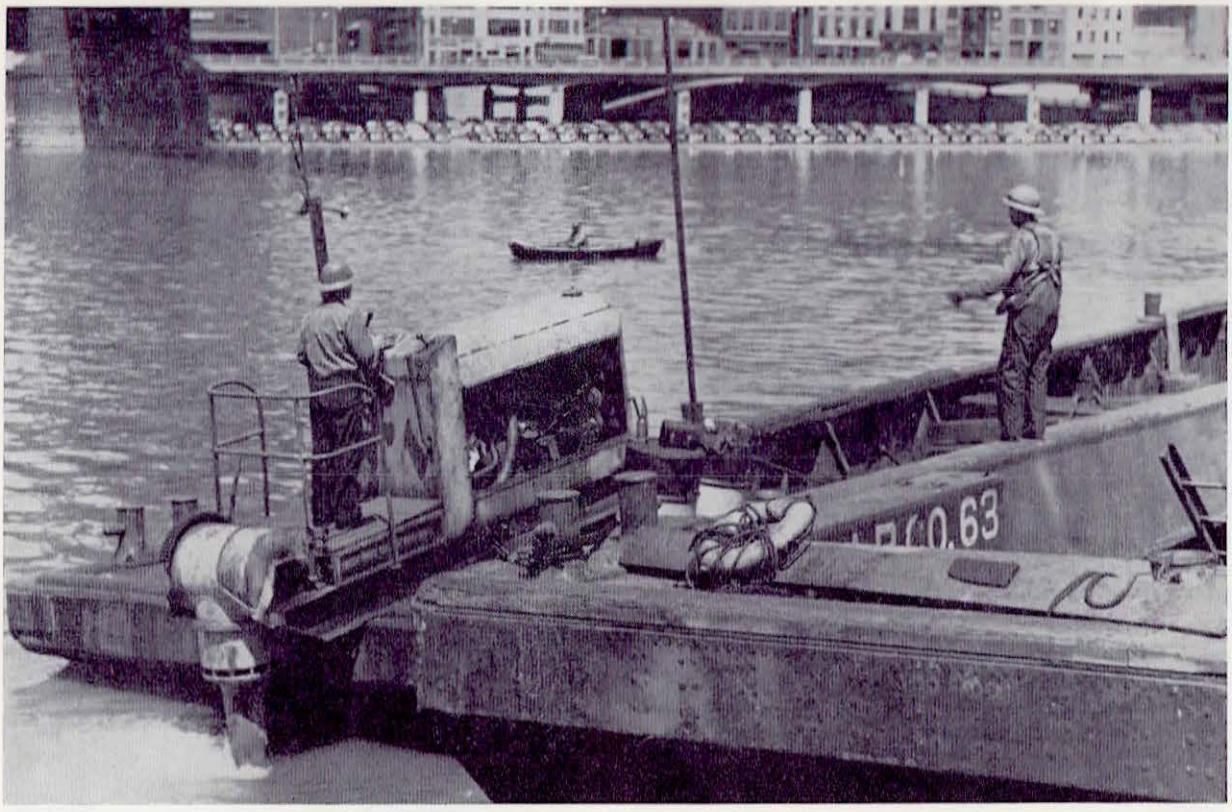

Scrap steel from the main span was lowered into steel barges, which were maneuvered by a homemade tug. A rowboat stood by at all times to perform rescue work, if needed

away from each other, removing the bridge members according to plan and lowering them into barges in the river below, where they were cut into scrap pieces weighing 10 tons or less. When loaded, the barges were towed to nearby mills of the Carnegie-Illinois Steel Company, where the released steel was used in the manufacture of new steel.

After the main span and the towers had been removed, the remainder of the work was over ground. The travelers, still backing away from each other, were then used to dismantle the two anchor arms, which were supported on steel falsework bents during this phase of the work, the bents being located at panel points where they would cause the least interference with activity at the ground level. The east anchor arm proved the most troublesome in this respect because it crossed several busy streets and also extended over some buildings on railway property. In one instance it was necessary to erect the falsework bent within an abandoned railroad power plant, bringing the bent up through the roof of the structure. The steel from the anchor arms was loaded into trucks for removal to the mills.

The west traveler was also used to dismantle the 264-ft. deck-girder viaduct west of the bridge. After the last of the girders had been removed, this traveler was moved onto the 139-ft. through-truss bridge, between the viaduct and the tunnel, for dismantling. The boom of the traveler was turned to the west and, after all of the top bracing of the bridge, except that at the west portal, was removed, the boom was lowered. A locomotive crane then dismantled the traveler and loaded its parts into work-train cars on the tracks of the P. & W. Va., which were then removed through the tunnel.

Dismantling the Truss Bridge

The crane then dismantled the truss bridge, the west panels of which were supported on one falsework bent, and loaded the material into cars on one of the Pennsylvania tracks below. The final work on this bridge was performed with the crane working directly in the east portal of the tunnel.

When this work was complete, the crane was removed through the tunnel, after which the tunnel tracks were taken up by railroad forces and both portals were sealed with concrete-block walls.

Meanwhile, two of the girders from the viaduct structure were salvaged and trucked to the east end of the main bridge, in downtown Pittsburgh, where they were erected on falsework in a position directly east of the east anchor arm. The east traveler moved onto a platform laid over these girders to dismantle the east panels of this arm, after which the traveler itself was dismantled by a crawler crane working at street level.

This project was carried out under the general direction of F. L. Riddle, chief engineer of the P. & W. Va., Pittsburgh, in cooperation with John Lowery, manager of erection of the American Bridge Company. K. L. Metzger was in direct charge of the work for the bridge company. Approximately 7,600 tons of steel scrap were realized from the project.

FIRST QUARTER BUYING OVER $½ BILLION

Purchases of materials, supplies and fuel down 2 per cent from '48—

Equipment orders lag—Crossties and miscellaneous material in demand

Purchases of materials, supplies, fuel and equipment during March totaled $196,297,000. This figure ran the buying for the first three months of the year to $554,069,000. While this amount is considerably below last year's first quarter's $755,797,000, expenditures for materials and supplies still are running strong, for manufactured products purchased through March of 1949 stand at $341,808,000, about 7 per cent above buying of similar items in 1948. Fuel buying and equipment account for the drop from last year's total.

Despite a decline in fuel inventories during February, total inventories at the end of that month were up 2 per cent from the preceding month. This was due mainly to sizeable increases in stocks of rail and ties on hand at the end of February. Comparatively heavy purchases of rail, ties and miscellaneous materials in January and February account for this increase The still large fuel stocks reflect, no doubt, the easy winter and to a certain extent the traffic decline that was evident in the first two months of the year.

1949 RAILWAY PURCHASES*

	March (000)	Three Month Totals 1949 (000)	Three Month Totals 1948 (000)
Equipment**	$ 19,023	$ 30,790	$223,971
Rail	9,792	25,796	24,722
Crossties	8,097	22,925	16,134
Other Material	100,450	293,087	278,385
Total from Manufacturers	$137,362	$372,598	$543,212
Fuel	58,935	181,471	212,585
Grand Total	$196,297	$554,069	$755,797

* Subject to revision
**Amount placed on order

Equipment orders in March had an estimated value of $19,023,000. This included about $1,970,000 for 469 freight cars and $17,052,600 for locomotives. Included in the locomotive orders were 69 Diesel units, 13 steam and 4 electric locomotives.

MARCH* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)

Year	March '49 Compared to Other Marches (000) Amt.	% Change
1943	$68,110	+74
1944	90,103	+31
1945	84,862	+39
1946	75,512	+57
1947	100,398	+18
1948	117,300	+ 1
1949	118,339	

Month	March '49 Compared to Other Months '48 and '49 (000) Amt.	% Change
Jan. '48	$102,136	+16
Apr. '48	111,691	+ 6
July '48	110,457	+ 7
Oct. '48	122,598	— 3
Jan. '49	114,528	+ 3
Feb. '49	108,941	+ 9
Mar. '49	118,339	

Year	Three Month Totals '49 and Other Years (000) Amt.	% Change
1943	$183,235	+87
1944	247,040	+38
1945	237,472	+44
1946	213,636	+60
1947	287,108	+19
1948	319,241	+ 7
1949	341,808	

MARCH* PURCHASES OF RAIL

Year	March '49 Compared to Other Marches (000) Amt.	% Change
1943	$4,718	+108
1944	7,700	+ 27
1945	6,531	+ 50
1946	3,250	+201
1947	6,779	+ 44
1948	8,822	+ 11
1949	9,792	

Month	March '49 Compared to Other Months '48 and '49 (000) Amt.	% Change
Jan. '48	$7,547	+30
Apr. '48	5,532	+77
July '48	7,143	+37
Oct. '48	9,603	+ 2
Jan. '49	7,359	+33
Feb. '49	8,645	+13
Mar. '49	9,792	

Year	Three Month Totals '49 and Other Years (000) Amt.	% Change
1943	$13,869	+ 86
1944	20,387	+ 27
1945	18,227	+ 42
1946	9,181	+181
1947	21,532	+ 20
1948	24,722	+ 4
1949	25,796	

MARCH* PURCHASES OF CROSSTIES

Year	March '49 Compared to Other Marches (000) Amt.	% Change
1943	$6,481	+25
1944	7,370	+10
1945	5,540	+46
1946	7,987	+ 1
1947	8,198	— 1
1948	5,868	+38
1949	8,097	

Month	March '49 Compared to Other Months '48 and '49 (000) Amt.	% Change
Jan. '48	$5,630	+44
Apr. '48	5,940	+37
July '48	7,621	+ 6
Oct. '48	9,880	—18
Jan. '49	7,799	+ 4
Feb. '49	7,029	+15
Mar. '49	8,097	

Year	Three Month Totals '49 and Other Years (000) Amt.	% Change
1943	$15,048	+52
1944	20,940	+ 9
1945	16,600	+38
1946	19,931	+15
1947	22,549	+ 2
1948	16,134	+42
1949	22,925	

*Subject to revision

MARCH* PURCHASES OF OTHER MATERIAL

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)			Three Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	$56,911	+77	Jan. '48	$88,959	+13	1943	$154,318	+90
1944	75,033	+34	Apr. '48	100,219	—	1944	205,713	+42
1945	72,791	+38	July '48	95,693	+ 5	1945	202,645	+45
1946	64,275	+56	Oct. '48	103,115	— 3	1946	184,524	+59
1947	85,421	+18	Jan. '49	99,370	+ 1	1947	243,027	+21
1948	102,610	— 2	Feb. '49	93,267	+ 8	1948	278,385	+ 5
1949	100,450		Mar. '49	100,450		1949	293,087	

MARCH* PURCHASES OF FUEL

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)			Three Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	$49,297	+20	Jan. '48	$73,468	—20	1943	$130,722	+40
1944	53,277	+11	Apr. '48	58,267	+ 1	1944	153,659	+18
1945	48,538	+21	July '48	68,011	—13	1945	139,713	+30
1946	53,881	+ 9	Oct. '48	68,503	—14	1946	154,538	+17
1947	58,539	+ 1	Jan. '49	65,076	— 9	1947	173,792	+ 4
1948	68,932	—15	Feb. '49	57,460	+ 3	1948	212,585	—15
1949	58,935		Mar. '49	58,935		1949	181,471	

MARCH* TOTAL PURCHASES (Excl. Equip.)

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)			Three Month Totals '49 and Other Years (000)		
Year	Amt.	% Change	Month	Amt.	% Change	Year	Amt.	% Change
1943	$117,407	+51	Jan. '48	$175,604	+1	1943	$313,957	+67
1944	143,380	+24	Apr. '48	169,958	+4	1944	400,699	+31
1945	133,400	+33	July '48	178,468	—1	1945	377,185	+39
1946	129,393	+37	Oct. '48	191,101	—7	1946	368,174	+42
1947	158,937	+12	Jan. '49	179,604	—1	1947	460,900	+14
1948	186,232	— 5	Feb. '49	166,401	+7	1948	531,826	— 2
1949	177,274		Mar. '49	177,274		1949	523,279	

MARCH* INVENTORIES OF RAIL

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	$20,651	+89	Jan. 1, '48	$32,924	+19
1944	25,199	+55	Apr. 1, '48	36,572	+ 7
1945	26,760	+46	July 1, '48	30,837	+27
1946	21,892	+78	Oct. 1, '48	33,163	+18
1947	31,217	+25	Jan. 1, '49	33,243	+17
1948	37,341	+ 5	Feb. 1, '49	36,408	+ 7
1949	39,054		Mar. 1, '49	39,054	

MARCH* INVENTORIES OF CROSSTIES

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	$58,999	+68	Jan. 1, '48	$92,300	+ 7
1944	76,254	+30	Apr. 1, '48	96,782	+ 2
1945	78,090	+27	July 1, '48	82,143	+20
1946	76,253	+30	Oct. 1, '48	79,148	+25
1947	92,861	+ 6	Jan. 1, '49	94,256	+ 5
1948	98,843	—	Feb. 1, '49	94,164	+ 5
1949	98,833		Mar. 1, '49	98,833	

MARCH* INVENTORIES OF OTHER MATERIAL

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	$371,835	+71	Jan. 1, '48	$560,703	+14
1944	393,892	+62	Apr. 1, '48	587,390	+ 8
1945	439,922	+45	July 1, '48	610,025	+ 4
1946	435,455	+46	Oct. 1, '48	611,887	+ 4
1947	498,159	+28	Jan. 1, '49	611,864	+ 4
1948	577,078	+10	Feb. 1, '49	626,423	+ 2
1949	636,700		Mar. 1, '49	636,700	

MARCH* INVENTORIES OF SCRAP

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	$10,385	+78	Jan. 1, '48	$13,225	+40
1944	9,925	+87	Apr. 1, '48	15,783	+17
1945	14,093	+31	July 1, '48	14,210	+30
1946	11,542	+61	Oct. 1, '48	14,378	+29
1947	17,017	+ 9	Jan. 1, '49	18,849	— 2
1948	16,409	+13	Feb. 1, '49	18,735	— 1
1949	18,532		Mar. 1, '49	18,532	

MARCH* INVENTORIES OF FUEL

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	$45,374	+95	Jan. 1, '48	$66,388	+34
1944	49,749	+78	Apr. 1, '48	64,153	+38
1945	52,237	+70	July 1, '48	83,946	+ 6
1946	61,588	+44	Oct. 1, '48	95,874	— 8
1947	52,233	+70	Jan. 1, '49	96,900	— 9
1948	65,071	+36	Feb. 1, '49	91,831	— 3
1949	88,647		Mar. 1, '49	88,647	

MARCH* TOTAL INVENTORIES

March '49 Compared to Other Marches (000)			March '49 Compared to Other Months '48 and '49 (000)		
Year	Amt.	% Change	Month	Amt.	% Change
1943	$507,244	+74	Jan. 1, '48	$765,540	+15
1944	555,019	+59	Apr. 1, '48	800,680	+10
1945	611,102	+44	July 1, '48	821,161	+ 7
1946	606,730	+45	Oct. 1, '48	834,450	+ 6
1947	691,487	+28	Jan. 1, '49	855,112	+ 3
1948	794,742	+11	Feb. 1, '49	867,561	+ 2
1949	881,766		Mar. 1, '49	881,766	

*Subject to revision

NEW CARS FOR "NEW ENGLAND STATES"

Two completely re-equipped "New England States Limiteds," operated daily in each direction between Boston, Mass., and Chicago by the New York Central-Boston & Albany, became the nation's newest streamliners with the introduction, on June 9, of all-stainless steel cars built by the Budd Company. The re-equipped trains each include a lounge-observation-bedroom car; lounge-buffet-bedroom car; roomette and roomette-bedroom cars; two dining cars; coaches, and a baggage-dormitory car. They are powered by two-unit, 4,000-hp. Diesel-electric locomotives built by the American Locomotive Company. The westbound train will leave Boston at 3.10 p.m., Eastern daylight time, arriving in Chicago at 8:50 a.m., Central daylight time; eastbound, it will leave Chicago at 3:30 p.m., and reach Boston at 10:30 a.m.

Above—The all-stainless steel, Budd-built observation cars seat 25 passengers, and include five double bedrooms and a service section

Below (left)—Preparatory to their consolidation, on June 19, with the all-coach "Paul Reveres," the re-equipped "New England States" will carry 56-reclining-seat, all-stainless steel, streamlined coaches. (Right)—Each train features two all-stainless steel Budd dining cars, each seating 44 passengers. One of the diners includes a grill section for the special accommodation of coach passengers

Martin W. Clement

Walter S. Franklin

M. W. Clement Elected Chairman of P. R. R.; Franklin Is President

Martin W. Clement, president of the Pennsylvania since 1935, this week was elected as the first chairman of the board in the railroad's 102-year history. He takes his new office June 16, and on that date Mr. Clement will be succeeded as president by Walter S. Franklin, who was appointed executive vice-president on April 1, 1947.

The purpose of the change in the executive organization, which was recommended by Mr. Clement, is to provide an executive arrangement whereby the president may share some of the newer responsibilities imposed upon top management of large corporations by conditions of the times, the railroad said. As president, Mr. Franklin will be chief executive officer, having general supervision and direction of the conduct and management of the affairs and business of the company. As chairman, Mr. Clement will act in an advisory capacity, as the representative of the board and its presiding officer, and will perform such other duties as may be prescribed by the board from time to time, including the appointment of committees of the board. The position of executive vice-president, vacated by Mr. Franklin's elevation to the presidency, is not being filled.

Problem Studied by Directors

These executive changes are the result of study, by a special committee of directors, of the responsibilities and burdens which modern conditions call upon the president of a large public service institution to carry, the road's statement continued. "In addition to the executive direction of the affairs of a company itself, its head is nowadays expected to participate in important public undertakings and organizations directly and indirectly related to the economic, political and social conditions under which the company has to operate. In these latter relationships and activities, as well as in an advisory capacity, it is believed that a chairman of the board, himself experienced in the presidency of the railroad company, can both cooperate effectively with the president and relieve him of a great deal of such extra-curricular, but essential, functions of his office."

Mr. Clement was born in Sunbury, Pa., on December 5, 1881. He was graduated from Trinity College, Hartford, Conn., with a bachelor of science degree, in 1901, in which year he joined the Pennsylvania as a rodman. Serving successively as transitman and assistant supervisor, he was promoted, in January, 1910, to supervisor in the office of the general manager at Philadelphia, Pa. He was transferred to the Manhattan division in June, 1913, and, in December, 1913, to the Pittsburgh division. Mr. Clement's next transfer was to the New York, Philadelphia & Norfolk (now part of the P.R.R. system), as division engineer, in December, 1914. He returned to the P.R.R. in August, 1916, in the same capacity, to make a study of improvements in the New York area. Appointed division engineer under the principal assistant engineer of the New Jersey division in November, 1916, he was made superintendent of the N.Y.P.&N. in June, 1917.

Worked Under U. S. R. R. A.

Mr. Clement was promoted, under the United States Railroad Administration, to superintendent of freight transportation. In March, 1920, after the return of the railroads to private operation and the inauguration of regional organization by the Pennsylvania, he was appointed general superintendent of the Lake division, with headquarters at Cleveland, Ohio. Three years later he went to Pittsburgh, Pa., as general manager of the Central region. In October, 1925, Mr. Clement assumed the then newly created position of assistant vice-president in charge of operation, with headquarters at Philadelphia. He was promoted to vice-president in charge of operation in September of the next year, with system jurisdiction. He was appointed vice-president in October, 1933, and in that position he had general supervision, under W. W. Atterbury, whom he was to succeed as president in 1935, of all departments of the railroad.

Mr. Franklin, the new president of the Pennsylvania, was born in Ashland, Md., on May 24, 1884, was graduated from Harvard University in 1906, and shortly thereafter joined the Pennsylvania. He began work at the Dock Street freight station in Philadelphia. Two years later he was transferred to the superin-

tendent's office at York, Pa. He was subsequently assigned to the freight traffic department at Baltimore, Md., New Haven, Conn., Toronto, Ont., Pittsburgh, and Atlanta, Ga. From May, 1917, to August, 1919, he was in the Army's Transportation Corps, where he had charge of American troop movements through England to France.

After completing his army service Mr. Franklin became, successively, vice-president and president of the American Trading Company in New York. In March, 1928, he rejoined the P.R.R. in the general freight office at New York. Shortly afterward he was appointed general agent at Detroit, Mich. Following a brief period as general superintendent of the P.R.R.'s Northwestern division at Chicago, he was elected president of the Detroit, Toledo & Ironton in July, 1929. He returned to the Pennsylvania in January, 1931, as assistant to the vice-president in charge of operation. Elected president of the Wabash and the Ann Arbor in October, 1931, he also was appointed receiver for the two roads in December of the same year. On October 19, 1933, he again returned to the P.R.R., this time as vice-president in charge of traffic, which position he held until his appointment as executive vice-president.

Country's Largest Railroad

The Pennsylvania Railroad Company, the nation's largest railroad in terms of revenues and tonnage, was incorporated in Pennsylvania on April 13, 1846. The company's charter authorized the construction of a railroad from Harrisburg to Pittsburgh, a distance of 249 miles. It was not until 1857 that it acquired, through purchase, a line to Philadelphia. The first section to be completed was opened for operation on September 1, 1849, between Harrisburg and Lewiston, 61 miles. Gross revenues from that date to December 31, 1850, totaled $339,452. In 1851 gross revenues amounted to $1,039,565.

On February 3, 1852, John E. Thomson, the company's first chief engineer, was elected president. Mr. Thomson believed it was almost as important for the company to invest capital in railroads being built by others in Ohio and Indiana as it was to finance the completion of the Pennsylvania itself. By so doing, he reasoned, the company would hasten the completion of these railroads and so shape their routes as to form connecting lines with the P.R.R. It is this policy to which the system owes its present form. During subsequent years the Pennsylvania negotiated leases of 999 years with many connecting lines, the most important of which was the Pittsburgh, Fort Wayne & Chicago, thus forming the continuous system now known as the Pennsylvania Railroad. In 1852 the P.R.R.'s gross revenue from operations east of Pittsburgh was $1,943,827. Twenty-one years later its gross revenue from the same territory was $39,983,138.

By means of lease, purchase and construction, the P.R.R. extended its operations west to St. Louis, Mo., with service to Chicago, Buffalo, N. Y., Akron, Ohio, Youngstown, Cleveland, Toledo, Cincinnati, Columbus, Dayton, Detroit, Mich., Grand Rapids, Indianapolis, Ind., Louisville, Ky., and all the territory embraced by these cities. In 1871 the company concluded negotiations with railroads operating between Philadelphia and Jersey City, N. J., for a 999-year lease of the lines and their terminal facilities in New York, Jersey City, N. J., and South Amboy. In 1892 a report was completed outlining various methods by which the system could be extended into and through New York City. Of the two final possibilities—tunneling under the Hudson river or bridging it—the former was chosen. Work was begun in 1904 and all tunnel facilities and the passenger station in New York were opened for service in the fall of 1910. The whole project had cost more than $112,000,000.

The Pennsylvania system at the end of 1948 operated 2,847.72 miles of owned line, 6,799.88 miles of contract line and 497.10 miles of line used under trackage rights. In addition to this 10,144.70 miles of first track, the system embraced 14,977.38 miles of second, third and fourth track and sidings. Approximately 2,667 miles of system tracks are electrified, which is said to be about 40 per cent of the total electrified standard railroad trackage in the country. Electrification of the lines between New York and Washington, D. C., including the Philadelphia and New York suburban areas, was begun in 1928. The road estimated the project would cost approximately $265,000,000. Although the country shortly after entered a period of severe economic depression, the Pennsylvania carried forward its plans for electrification.

In 1948 freight revenues of the Pennsylvania totaled $752,967,854, compared with $333,350,239 in 1936, the first full year of Mr. Clement's presidency. Revenue freight carried in the later year amounted to 245,535,129 tons, compared with 163,108,774 tons in 1936. Passenger revenues last year were $160,304,005, compared with $67,552,238 twelve years before. The number of passengers carried increased from 64,617,913 in 1936 to 100,481,264 in 1948. The average passenger revenue per train mile was $1.58 in 1936 and $3.63 in 1948.

Communication...

Railroad Jingles

Woodside, N. Y.

To the Editor:

Mr. E. Alfred Seibel's letter to the editor in the March 26 *Railway Age* remarks of transcribed radio commercials that "the railroads could use this form of advertising to their advantage."

"They could use a musical jingle," writes Mr. Seibel, "giving the telephone number where train information is obtainable. Also play up the hopeless traffic and parking situation in large cities where congestion is a problem."

I suspect that Mr. Seibel may be aware of the fact that the Boston & Maine once caused the ears of Bostonians to be smitten with a ditty running something like this:

"No parking worries, no headlight glare,
"You'll save money with our new low fare."

The use of this couplet should indicate unmistakably that the idea of using musical jingles in railroad advertising is nothing new.

W. H. Higginbotham

A group of the conventioners talking things over. Left to right, L. Mayrisch, manager freight protection and station service, Southern Pacific; J. M. Feeney, manager New York Terminal Matching Bureau; A. E. Ward, agent, Chicago, Milwaukee, St. Paul & Pacific, Galewood, Ill.; W. G. Miller, agent Pennsylvania, Polk St., Chicago

Costs and Service Get Agents' Attention

Instructive committee reports feature largely attended meeting of Freight Station Section; Allan of Canadian National next chairman

Better service and the paring of operational costs, described as the only means by which the railroads could stay in the transportation business, were the keynotes of discussion at the largest of all annual sessions of the Freight Station Section, Association of American Railroads, attended by more than 800 and held at Chicago's Congress Hotel, May 25-27. From the moment when J. L. Webb, manager of stations and motor service of the Pennsylvania, and chairman of the section, made his opening remarks, it was clear that all present were conscious of the factors which could help bring more business to the railroads. Thus, from the service angle, discussion centered on better tracing, speedier and damage-free handling, better outturn reports on cars containing damaged freight, courteous and prompt handling of shipper inquiries, and so on. The merits and demerits of various methods of materials handling, loss and damage prevention, billing and rating also were described and discussed.

The importance of the agent in the railroad picture was emphasized repeatedly, for varied reasons, for as J. P. Kiley, vice-president operations of the Chicago, Milwaukee, St. Paul & Pacific, said in his address, "Practically all the traffic, transportation, and in many instances, operating problems revolve around the station agent in one way or another." L. W. Baker, freight traffic manager, sales and service, of the Baltimore & Ohio, told the group that he considered the agents as members of the traffic department—even though generally they are classed as operating personnel—because they, the men on the "firing line," had the close relationships with the shippers, and therefore could do more than anyone else to sell what the railroads produce.

Both Mr. Baker and C. H. Longman, vice-president operation of the Chicago & North Western, said that the agent was one man in the local community who could see the growth of socialism in that community—including the subsidization of the railroads' competitors—and was in a position to do something about it. Mr. Longman went into detail about how the trucks were breaking up the highways, and urged the agents to fight further subsidization. He went on to say that increasing socialism, plus increased railroad costs, were the main factors which have forced the railroads to raise their rates to the point where the truck lines can compete effectively with the railroads. As a result, Mr. Longman said, while the ratio of station platform men to truckers was 50-50 a few years ago, today there are 80 truckers for every 20 station platform men, and a substantial part of the more profitable business has gone to the trucks.

Loss and Damage

Although all of the speakers touched on the service question, Mr. Baker was especially specific, since he described in some detail the B. & O.'s "Sentinel Service," as one example of what could be done, and how, to improve service. Irving M. Peters, general traffic man-

ager of Corn Products Refining Company, and general chairman of the National Management Committee, 1949 Perfect Shipping Campaign, of the Shippers' Advisory Board, emphasized how the shipper looked at that interruption to good service—loss and damage.

To the shipper, Mr. Peters said, loss and damage meant unsatisfactory service to his customer, and frequently, customer irritation and possible loss of business. He said that shippers frequently realized that not all loss and damage was due to poor handling by the railroads, but that some of it was due to their poor packaging, blocking and bracing. However, he continued, since a very high proportion of claims were filed by the consignee, all too frequently the shipper is not aware that his freight is not getting to destination in good shape, and more important does not know why it is not arriving damage-free. While the speaker realized that the agent could not inspect each carload coming into his territory, he did suggest that if the agent could arrange more "'sample' inspections where you know the same commodities, or cars from the same shipper, are repeatedly coming in damaged, the shipper is intelligent enough to draw reliable conclusions from reports on a small percentage of his cars. With reports coming from different customers or stations the element of opinion would be reduced. . . . He [the shipper] would be much more likely to take corrective action than would be the case if such information were not placed in his hands."

Mr. Peters urged his listeners to be sure that loss and damage reports really say something, for "the loss and damage prevention resources available to the freight agent are virtually unlimited. Hs sees most of the causes and effects, and precisely to the extent that he makes completely sure that he gets the facts, and either corrects causes as they may exist at his own station or reports them, understandably, to the loading station or to the proper railroad officer for attention of the shipper, he makes it possible to cure the trouble." He further asked the agents to refuse to accept improperly packaged shipments, for in so doing they would be doing both the carrier and the shipper a favor.

Keeping "Books" Straight

R. E. Connolly, vice-president accounting of the Illinois Central, speaking at the morning session on May 27, reminded the agents that while their duties were legion, certainly one of the most important was keeping a good account of the railroads' monies taken in and disbursed at stations. He urged care in the preparation of reports and in rating and billing. Claims for overcharges, Mr. Connolly said, were on the increase, and not only were causing both the accounting and stations departments extra work, but were making dissatisfied patrons. He suggested that agents handling claims be especially careful to send supporting papers with every claim. This would help eliminate delay in settlement, he concluded, perhaps mollify the shipper somewhat, and let the railroad know its financial position at an earlier date.

On the last day of the meeting F. C. Love, manager of property protection and freight claims of the New York Central, and Mr. Webb's predecessor as chairman of the Freight Station Section, presented to Mr. Webb a scroll complimenting his tireless and fruitful activities as head of the section.

C. F. Allan, superintendent of station service and weighing of the Canadian National, the incoming chairman of the section, was unable to be present at the session, due to illness.

Brief digests of the reports of the four committees and accompanying discussion appear below.

Committee on Station Traffic

(Chairman, G. R. Littell,
terminal agent, B. & O., Cleveland, O.)

Once again this committee concerned itself with the training of freight station employees, courtesy, the railroad "price list" and the modernization of billing and rating methods on l.c.l. freight. One of the main concerns of this group was expressed in papers prepared by the local freight agent groups from Montgomery, Ala., and Chicago. This year, the emphasis was on the dollars-and-cents cost of the present "muddled" tariff situation. This subject, having been brought before the meeting a year ago at Buffalo, by the same Chicago agents, and considered then as confusing, was called by a different name this year. "A year ago," they said, "we thought we had a problem. The long-suffering rate clerk—the tariff user, the fellow on th firing line, the fellow who has exhausted all the gestures of futility—apparently has been abandoned to his hallucinations by the hierarchy of systematized contradiction and confusion. Through the past twelve months, the evolution of the tariff schedules has passed the realm of confusion; these tariffs now stand as a symbol of modern inexpediency." The Montgomery agents, for their part, said "it is doubtful if there is an agent present who could go to the tariff file in his office . . . and check a simple local class rate unassisted, without requiring an hour or more of time to do it." Such a "system," is hurting the railroads, they continued, for "it is just as necessary for the shipper to know accurately his transportation costs as it is to know the price of the goods he buys." Directly borne by the railroads, too, is the increased cost of rating, a result of the necessity either for additional rate clerks or increased time in which to do the rating.

In the discussion which followed the reading of these papers, S. E. McMaster, agent, P.R.R., Philadelphia, told how, in 1939, some of his rate clerks were rating 800-1,100

ment was followed by a further hearing on the eastern rate pact. That was before Commissioner Rogers and Examiner Burton Fuller and the department undertook to introduce as evidence additional documents whereby it expected to show that the A.A.R. has participated in rate-making activities of the railroads. These included letters and other material taken from files of the A.A.R. and the territorial traffic associations. The material was assembled into 51 separate exhibits which Mr. Kilday offered as evidence. Commissioner Rogers ruled that all except two were inadmissable, the two which were received being articles of organization and rules of procedure (as of August, 1945) of the Presidents' Traffic Conference—Eastern Territory, and of the Traffic Executive Association—Eastern Territory.

That closed the hearings on the eastern agreement, and Commissioner Rogers announced that briefs would be due September 1 and reply briefs September 20. This proceeding is docketed as Section 5a Application No. 3. In closing the hearing on the car hire, demurrage and storage agreement, Examiner Hall had announced that briefs in that proceeding (Section 5a Application No. 7) would be due July 20, and that reply briefs would be due 20 days thereafter.

A.R.E.A. Elects Hastings To Honorary Membership

By action of the board of direction of the American Railway Engineering Association, Edgar M. Hastings, chief engineer, Richmond, Fredericksburg & Potomac, has been elected an honorary member of that association. At the time of his election, Mr. Hastings was the eighth honorary member, but the number has since been reduced to seven by the death on April 12 of C. A. Morse, formerly chief engineer of the Chicago, Rock Island & Pacific. Mr. Hastings has been a member the A.R.E.A. since 1912. He was elected a director in 1932, was advanced to vice-president in 1937, assumed the presidency in 1939, and following the completion of his term as president in March, 1940, continued as a member of the board of direction in the capacity of past-president until March, 1948. To be eligible for honorary membership in the A.R.E.A. a person must have achieved "acknowledged eminence in railway engineering or management."

Northern Pacific Train Radio In Service Over Cascade Mts.

The Northern Pacific, on June 6, inaugurated end-to-end train radio communication service on its through mainline freight trains over the Cascade mountains. The new installations—which have been made in 13 Diesel road locomotives and 11 cabooses in service on an entire subdivision between Auburn, Wash., and Yakima, 139 mi.—will facilitate operation particularly during adverse weather.

Ground radio stations have been erected at Auburn and Yakima for communication with trains approaching or departing from terminals. All radio sets operate on either of two frequencies—one for end-to-end communication and the other for communication between fixed points and trains.

M. P. Halts Major Overhauling Of Steam Locomotives at K. C.

The Missouri Pacific has discontinued making extensive repairs to steam locomotives at its Kansas City (Mo.) shops, and has transferred this work to M. P. shops at Sedalia, Mo., and North Little Rock, Ark. A reduction in business volume and the transition to Diesel power were given as the reasons for the change.

Depreciation of Rail Securities Threatens "American Way"

Charging that the "shocking depreciation" in the value of railroad securities, plus the approaching "collapse" of railroad passenger service, constitutes a "threat to our American way of life," Robert R. Young, chairman of the board of the Chesapeake & Ohio and chairman of the Federation for Railway Progress, sharply criticized government policies toward the railroads in an address delivered on June 7 at the commencement exercises of the Pennsylvania Military College, Chester, Pa., at which he was awarded an honorary degree of Doctor of Laws.

"Despite waterways and growing competition from airways, highways and pipe lines, demand for rail service in 1948 nearly doubled that of 1938," Mr. Young said in part.

"One would think that in the face of this record demand and remarkable relative economy the railroads would be highly prosperous and well maintained. Such is far from the case. In the 16 peacetime years since 1929 the railroads have arbitrarily and unnecessarily been held down to an average return of 2.87 per cent on property investment. Other far less essential industries earn three to 10 times as much. Average rail dividends by 1939 had shrunk to less than 1½ per cent, about half of what the investor could have earned on government bonds. Not for 20 years have the rails been able to raise money for improvements and extensions through sale of equity securities. . .

"The stock of the New York Central in 1929 sold at $256 per share and paid dividends of $8 per share. Today, rendering vastly greater service, after 16 years of the New Deal, it has declined to $10 a share. This shocking depreciation in the value of the most essential unit of capital on earth, the jugular vein of our industrial empire, standing back, as it does, of our Army and Navy, constitutes a threat to our American way of life, far greater than does any of the multitude of theoretical dangers our Marshall Plan billions are being scattered futilely about to correct. Germany or Japan you can take hold of and lick, given sound railroads, but the corrupt forces of a degenerating capital society cannot be so easily isolated and stamped out.

"Though Congress will again look to the rails in the event of new war, it promiscuously taxes all of us, including the railroads, in order that members may trade off among themselves airports for bus terminals and highways for waterways. Tolls are not charged the users of these tax built facilities because the inadequacy of the revenues that could thus be realized, in relation to the capital cost, would only expose the absurdity of the appropriations.

"Of the postage charged by the government for carrying each letter the railroads are allowed to keep one-half cent, while the airlines, through the influence of a powerful lobby, get five cents, or just 10 times as much. Last year, when the air lines generally operated in the red, their deficits were quickly made up through a special grant of Congress. . .

"Because of this unfair competition from Congress, railroads have now begun to take passenger trains off the rails, wholesale, across the country, seriously aggravating rising railroad unemployment. At least one-half of rail passenger train mileage promises to disappear in the next few years unless other railroads quickly cooperate with the C. & O. in putting its revolutionary new lightweight "Train X" on the rails.

"No one interested in the preservation of private enterprise or in freedom as we have known it can look with complacency upon the coming collapse of rail passenger service. As the rails go, so goes not only industry but defense. Our turban population in its highly complex specialization would become a panic stricken mob to overrun the countryside in its hunger if rail transportation broke down for as much as two weeks. Every manufactory in the country would close. Our troops abroad would be marooned and would fall easily into enemy hands."

R. E. A. to Inaugurate Sales Program August 1

"A hard, two-fisted selling program of planned performance with the objectives of increased business and job security" is the keynote of a national selling program to be inaugurated on August 1 by the Railway Express Agency, according to E. W. Hull, general manager of public relations and sales.

"Let's Look Ahead" is the title of the sales plan, which outlines in detail the subjects to be discussed, the manner in which meetings should be held and the benefits to all employees anticipated from the program. Job security through increased business will be stressed.

The first meetings, to be held August 1 by the four operating vice-presidents, will be attended by general managers, superintendents and other officials. They

ager of Corn Products Refining Company, and general chairman of the National Management Committee, 1949 Perfect Shipping Campaign, of the Shippers' Advisory Board, emphasized how the shipper looked at that interruption to good service—loss and damage.

To the shipper, Mr. Peters said, loss and damage meant unsatisfactory service to his customer, and frequently, customer irritation and possible loss of business. He said that shippers frequently realized that not all loss and damage was due to poor handling by the railroads, but that some of it was due to their poor packaging, blocking and bracing. However, he continued, since a very high proportion of claims were filed by the consignee, all too frequently the shipper is not aware that his freight is not getting to destination in good shape, and more important does not know why it is not arriving damage-free. While the speaker realized that the agent could not inspect each carload coming into his territory, he did suggest that if the agent could arrange more "'sample' inspections where you know the same commodities, or cars from the same shipper, are repeatedly coming in damaged, the shipper is intelligent enough to draw reliable conclusions from reports on a small percentage of his cars. With reports coming from different customers or stations the element of opinion would be reduced. . . . He [the shipper] would be much more likely to take corrective action than would be the case if such information were not placed in his hands."

Mr. Peters urged his listeners to be sure that loss and damage reports really say something, for "the loss and damage prevention resources available to the freight agent are virtually unlimited. Hs sees most of the causes and effects, and precisely to the extent that he makes completely sure that he gets the facts, and either corrects causes as they may exist at his own station or reports them, understandably, to the loading station or to the proper railroad officer for attention of the shipper, he makes it possible to cure the trouble." He further asked the agents to refuse to accept improperly packaged shipments, for in so doing they would be doing both the carrier and the shipper a favor.

Keeping "Books" Straight

R. E. Connolly, vice-president accounting of the Illinois Central, speaking at the morning session on May 27, reminded the agents that while their duties were legion, certainly one of the most important was keeping a good account of the railroads' monies taken in and disbursed at stations. He urged care in the preparation of reports and in rating and billing. Claims for overcharges, Mr. Connolly said, were on the increase, and not only were causing both the accounting and stations departments extra work, but were making dissatisfied patrons. He suggested that agents handling claims be especially careful to send supporting papers with every claim. This would help eliminate delay in settlement, he concluded, perhaps mollify the shipper somewhat, and let the railroad know its financial position at an earlier date.

On the last day of the meeting F. C. Love, manager of property protection and freight claims of the New York Central, and Mr. Webb's predecessor as chairman of the Freight Station Section, presented to Mr. Webb a scroll complimenting his tireless and fruitful activities as head of the section.

C. F. Allan, superintendent of station service and weighing of the Canadian National, the incoming chairman of the section, was unable to be present at the session, due to illness.

Brief digests of the reports of the four committees and accompanying discussion appear below.

Committee on Station Traffic

(Chairman, G. R. Littell,
terminal agent, B. & O., Cleveland, O.)

Once again this committee concerned itself with the training of freight station employees, courtesy, the railroad "price list" and the modernization of billing and rating methods on l.c.l. freight. One of the main concerns of this group was expressed in papers prepared by the local freight agent groups from Montgomery, Ala., and Chicago. This year, the emphasis was on the dollars-and-cents cost of the present "muddled" tariff situation. This subject, having been brought before the meeting a year ago at Buffalo, by the same Chicago agents, and considered then as confusing, was called by a different name this year. "A year ago," they said, "we thought we had a problem. The long-suffering rate clerk—the tariff user, the fellow on th firing line, the fellow who has exhausted all the gestures of futility—apparently has been abandoned to his hallucinations by the hierarchy of systematized contradiction and confusion. Through the past twelve months, the evolution of the tariff schedules has passed the realm of confusion; these tariffs now stand as a symbol of modern inexpediency." The Montgomery agents, for their part, said "it is doubtful if there is an agent present who could go to the tariff file in his office . . . and check a simple local class rate unassisted, without requiring an hour or more of time to do it." Such a "system," is hurting the railroads, they continued, for "it is just as necessary for the shipper to know accurately his transportation costs as it is to know the price of the goods he buys." Directly borne by the railroads, too, is the increased cost of rating, a result of the necessity either for additional rate clerks or increased time in which to do the rating.

In the discussion which followed the reading of these papers, S. E. McMaster, agent, P.R.R., Philadelphia, told how, in 1939, some of his rate clerks were rating 800-1,100

bills per day. At present, he said, the same good men are averaging about 350 per day. In addition, the percentage of error has gone up from 1 per cent in 1939 to 9 per cent in 1949.

The Freight Agents' Association of Kansas City called for "modern billing and rating methods" as one means of getting l.c.l. back to the railroads. This group urged "bold experimentation" with new methods as suggested by the I.C.C., and recognized that "added manpower or a liberal credit for outside funds never has substituted for efficiency and never will do so." They suggested prepayment of all charges on l.c.l., making the originating agent responsible for making correct transportation charges, a nationwide use of the combination waybill-freight bill forms, simplification of l.c.l. rate sheets, moderation of the classification rule covering packages containing a mixture of commodities, and a charge for extra copies of freight bills.

All papers were referred to the Committee of Direction for action.

(Chairman, A. E. Ward, agent, C. M. St. P. & P., Chicago)

Committee on Loss and Damage

One of the papers on the docket of this committee contained a sentence which might be taken as the theme of the discussion and papers on loss and damage, viz., "The day is now here when the shippers are not asking but demanding that their shipments move via the line that handles them *without loss and damage*." This paper recommended wider use of bulkheads and such special device cars as those used by the Pennsylvania in handling l.c.l. The local freight agents of New Orleans, La., favored holding over until the next day shipments which arrive at the freight-house too late to be properly loaded into cars. Their thought was that hasty and therefore frequently improper loading in the last minute rush was one of the main causes of damage to l.c.l. One other step toward decreasing the amount of loss and damage to l.c.l., this group continued, would be an improvement in the quality of work done in railroad coopering shops at stations.

Agents from Philadelphia submitted a paper in which they favored a standard form of damage report on carload freight which would get back to the origin agent and tell him something about the damage. On the same topic, the agents from Kansas City asked that inspections actually be made, so that reports would not get to the agent at origin reading "consignee says thus and so." Only in this way, they said, can any real improvement be made in the blocking and loading practices which can do so much to cut down the amount of loss and damage.

Better cleaning and preparation of cars for reception of shipments also came in for discussion, as did the use of a new steel bulkhead of a type now in service on several eastern lines. This particular bulkhead can be applied in a matter of three minutes, it was said, and requires no blocking or strapping. Clamps, like ice creepers, dig into the walls of the car and hold bulkhead and lading in place.

(Chairman, J. F. Kohout, agent, Chicago & North Western, Proviso, Ill.)

Committee on Station and Terminal Operation

One of the major subjects on the docket of this committee was mechanical handling of freight. The agents from Chicago recommended that all concerned study the feasibility of mechanization as a cost cutting measure, with the thought that there is some form of mechanical handling that would fit any operation. They also urged all agents not to look first at the long and awkward pieces of freight that do not lend themselves to this type of handling, for "this type of freight represents a very low percentage of the volume handled in the general flow of traffic," although it was realized that there are some stations where this type of freight represents a sizeable proportion of the tonnage. The paper went on to say that the full possibilities of mechanical handling had not yet been realized, and "there is yet a field for expansion involving the picking up of freight on pallets, skids, in [palletized] containers, etc., and delivering them to the ultimate consignee through a process of mechanical handling. . . . When our patrons ship a ton of freight they pay freight charges for only one ton, regardless of the number of times we handle it. The fewer times we handle it, the greater will be our economy, the speedier will be our service, and the lower our loss and damage claims."

Stop-off cars were another subject of debate at this committee's sessions. This type of shipping, where the shipper gets the benefit of the carload rate although the shipments are really l.c.l., has been a large source of claims. The local agents of Chicago urged definite fixing of shipper responsibility for properly preparing each stop-off lot in the car, while the New York group favored handling by the carriers where the shippers did not accept their responsibility, the carrier, however, to receive remuneration for performing this work. [This would require some tariff changes.] This subject was referred to the Committee of Direction for handling with the traffic division of the A.A.R.

Committee on Station Office Operation

(Chairman, H. A. Freeman, agent, Grand Trunk Western, Chicago)

One of the papers on this committee's docket, presented by the agents from Philadelphia, described the new method used by the Pennsylvania in handling the billing on prepaid shipments. This is being done by the use of a camera which can make about 5,000 bills in an eight-hour trick for one operator. Shipping orders are given a waybill number by means of a station stamp and the freight bills are produced by the use of the camera after two masks which have the usual freight bill heading and footing, respectively, are placed at top and bottom of the shipping order. If extra copies of freight bills are needed, they are made by a black and white printer which produces them at the rate of 2,000 per hour.

This paper also described briefly the Pennsylvania's new process of station accounting, which features the use of punch card equipment. Under this system, many stations other than those in the immediate Philadelphia area send their shipping orders and waybills to Philadelphia at the close of the business day, and the processed bills, together with the abstracts of waybills received, are back to them for the next business day. Thus, almost all the station accounting work for stations many miles away is done mechanically. The cards punched during this process of drawing off information from waybills also are used in preparing the various statistics needed by the traffic department.

Another paper by this same group advocated the "vericheck" ballot system as a means of establishing a good trace record. This paper drew much discussion, and one speaker insisted that better service would obviate the necessity for any elaborate system of tracing, since shippers would not be worried about where the freight was if they had reasonable assurance of on-time delivery. Another paper suggested the need for a telegraphic report to agent at destination of cars set out en route, with probable date of reforwarding included in the report.

The agents from Miami, Fla., feeling that too much money is being spent by the railroads in matching overs and shorts, suggested that the railroads apply to l.c.l. shipments a label which would show destination station, delivering railroad, originating railroad, the waybill number and the number of pieces in the shipment. While this would be an expense to the railroads the Miami agents thought that in the long run it would save money. Since the Railway Express Agency and a number of the freight forwarders are using this system already, they thought it possible for the railroads to do the same, though possibly with some variations. This paper was referred to the Committee of Direction for study.

Once again the uniform bill of lading came up for discussion. The freight agents from St. Paul, Minn., felt that shippers' efforts to prepare many other documents at the time they prepare the bill of lading were causing much confusion on freight station platforms, and that this practice of combining "is out of control."

"It is our opinion," the paper went on, "that some method should be considered by which the various business [machine] concerns and printers could meet with the A.A.R. Freight Station Section authorities to develop a method of preparing forms that would satisfy the customer. Yet they should make shipping documents that would meet with the railroads' approval. A description should be used that complies with the classification so that the railroads would have a chance to bill the shipments properly. . . . Probably a mandatory order will make this come to a head. There should be a uniform bill of lading used in a uniform manner." This paper also was referred to the Committee of Direction for consideration.

I. M. Peters, general traffic manager, Corn Products Refining Company, talked to the agents on loss and damage. To Mr. Peters' left is J. L. Webb, manager stations and motor service, Pennsylvania, retiring chairman of the Freight Station Section

GENERAL NEWS

Eastern Roads Seek 12.5% Fare Increase

Want rate of 3.375¢ per mile in coaches; 4.5¢ in Pullmans

Eastern railroads on June 3 asked the Interstate Commerce Commission for permission to raise basic passenger fares in coaches and in sleeping and parlor cars by 12½ per cent, or from 3 cents to approximately 3.375 cents per mile in coaches, and from 4 cents to 4.5 cents per mile in sleeping and parlor cars. The Eastern roads pointed out in the petition that their net railway operating deficit from passenger service increased from $198,639,000 in 1947 to $252,177,000 in 1948, an increase of $53,538,000. The 1948 deficit was the greatest in history.

"Passenger traffic," the petition continued, "reasonably and justly should contribute as much as possible towards meeting the increased operating expenses which have been incurred in providing passenger service. The current and anticipated volume of passenger business is such a substantial and important part of petitioners' business that it is essential to their financial well-being that increased revenues be secured for handling the traffic."

Since the present basic passenger fares became effective in July, 1948, the following increased costs have already been incurred or soon will be incurred by the Eastern railroads, based on estimated operations for 1949, the petition said:

1. Increase of 7 cents per hour in wage rates to non-operating employees, effective October 1, 1948	$87,400,000
2. Increase of 10 cents per hour in wage rates of operating employees, effective October 16, 1948.....	42,200,000
3. Increase in rate of payroll taxes, from 6¼ percent to 6½ percent effective January 1, 1949	4,900,000
4. Increas in unit price of fuel, material and supplies, May 1, 1949, over June, 1948	30,400,000
5. Additional vacation with pay to operating employees, effective July 1, 1949	5,000,000
6. 40-hour week (with 48-hour pay) to non-operating employees, effective September 1, 1949	200,000,000
7. Total	$369,900,000

Wage rates of the Eastern roads, when the 40-hour week for non-operating employees goes into effect on September 1, will be approximately 105 per cent greater than in 1940, the announcement of the petition's filing said. Excluding the cost of additional vacations for operating employees, effective July 1, and the cost of the 40-hour week for non-operating employees, effective September 1, 1949, it added, the payroll of the Eastern roads in 1949, together with payroll taxes, will approximate $2,250,000,000 or about $1,015,000,000 more than if computed at the 1940 rates of pay. Including additional vacations and the 40-hour week, on an annual basis, payroll and payroll taxes will approximate $2,455,000,000 annually, or $1,220,000,000 more than at 1940 wage and payroll tax rates.

As to unit prices paid by the Eastern roads for fuel, material and supplies, the announcement said that on May 1, such prices were 107.6 per cent greater than in 1940. The charges for these items in 1949 will approximate $900,000,000, or $465,000,000 more than if the same quantities had been bought at 1940 prices.

Showing the effect of these increases, the carriers stated that, combining wages, payroll taxes and the cost of fuel, material and supplies, their unit costs are currently running 88.6 per cent above 1940. After September 1, these units will be 100.9 per cent above the 1940 figure.

The petitioning railroads pointed out that during the past year they have received and placed in service a large number of units of modern passenger equipment costing many millions of dollars. Additional new and improved passenger equipment is still on order and will be placed in service in the near future. The prices of this new equipment are greatly in excess of those of prewar years. It is the petitioners' position that the use of this new and improved passenger equipment has increased and will continue to increase the value of the railroads' service to the public.

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—National St. Lawrence Project Conference

Defend Pact on Car-Hire, Demurrage, Storage Rules

Continuance of present methods essential, executives tell I.C.C.

Hearings were held last week by the Interstate Commerce Commission in connection with its consideration of the procedural agreement filed by railroad parties to the car-hire, demurrage and storage rules which are administered through the Association of American Railroads. As noted in *Railway Age* of January 15, page 41, the agreement and application for its approval were filed under the Interstate Commerce Act's section 5a which was added last year by the Bulwinkle-Reed Act.

Presiding at the hearings which were held in Washington, D. C., on June 2 and 3 was Examiner G. J. Hall. Railroad executives who appeared in support of the agreement were C. H. Buford, president of the Chicago, Milwaukee, St. Paul & Pacific; J. M. Symes and H. A. DeButts, vice-presidents in charge of operation of the Pennsylvania and Southern, respectively; and J. M. Hood, president of the American Short Line Railroad Association.

Gilbert F. Ford of Swift & Co., who appeared on behalf of the National Industrial Traffic League's demurrage and storage committee, also supported the application. He suggested, however, that some parts of the proposed agreement might well be rewritten to insure that a shipper or railroad would have the right

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If vast projects like the St. Lawrence seaway and new T.V.A.s should be authorized, it would mean large-scale deficit financing, declared Senator Byrd, of Virginia, a few days ago. "And," said Mr. Byrd, "I gravely doubt if ever again our federal budget would be in balance. Our credit would be wrecked and our system of government destroyed."

—National St. Lawrence Project Conference

Defend Pact on Car-Hire, Demurrage, Storage Rules

Continuance of present methods essential, executives tell I.C.C.

Hearings were held last week by the Interstate Commerce Commission in connection with its consideration of the procedural agreement filed by railroad parties to the car-hire, demurrage and storage rules which are administered through the Association of American Railroads. As noted in *Railway Age* of January 15, page 41, the agreement and application for its approval were filed under the Interstate Commerce Act's section 5a which was added last year by the Bulwinkle-Reed Act.

Presiding at the hearings which were held in Washington, D. C., on June 2 and 3 was Examiner G. J. Hall. Railroad executives who appeared in support of the agreement were C. H. Buford, president of the Chicago, Milwaukee, St. Paul & Pacific; J. M. Symes and H. A. DeButts, vice-presidents in charge of operation of the Pennsylvania and Southern, respectively; and J. M. Hood, president of the American Short Line Railroad Association.

Gilbert F. Ford of Swift & Co., who appeared on behalf of the National Industrial Traffic League's demurrage and storage committee, also supported the application. He suggested, however, that some parts of the proposed agreement might well be rewritten to insure that a shipper or railroad would have the right

to initiate matters before the proposed committees; and to insure continuance of present liaison arrangements between the League and the A.A.R. Department of Justice attorneys, headed by James E. Kilday, special assistant to the attorney general, were also on hand to register the department's opposition to commission approval of the application.

The principal statement in support of the application was made by Mr. Buford, who was an A.A.R. vice-president in charge of the Operations and Maintenance Department during the period from 1939 to 1946. He said that he regarded the proposed agreement to be in furtherance of the national transportation policy, because there can be no national system of rail transportation such as the policy calls for, in the absence of "unrestricted" interchange of freight cars.

"Such a system of interchange requires more than standard gage of track and standards of construction of equipment," Mr. Buford explained. "It requires also a uniform and generally agreed basis of compensation for the use of cars of foreign ownership—whether such compensation be on a per diem or a mileage basis. . . . Furthermore, the rendition of an efficient and economical national transportation service clearly requires that the available car supply should not be depleted by undue detention of cars by shippers or receivers of freight. This not only justifies, but in my judgment requires, a charge for dentention of cars by shippers or consignees beyond an allowance of free time determined upon as reasonable. And in this connection, it seems obvious that if discrimination and undue preferences, as between localities and as between shippers, are to be avoided, overall uniformity in respect to demurrage charges and demurrage rules is essential. . . .

"This requirement of uniformity with respect to per diem, mileage and demurrage and storage clearly calls for collective action by the railroads and an agreed procedure for the establishment and adjustment from time to time of the charges themselves, and the rules and regulations governing their assessment and collection. The procedure provided for in the agreement submitted for approval in this proceeding in my judgment is appropriate to that end."

The Milwaukee president went on to point out that there was "nothing new" about the proposal, because per diem has been the subject of nationwide handling since 1902, mileage allowances since 1920, demurrage since 1910, and storage since 1912. "The procedures provided for in the agreement," he added, "do not represent any fundamental departure from past practices which were evolved out of experience as to what is necessary to the rendering of a national transportation service." Mr. Buford also noted that the "more than 575" railroads had joined in the proposed agreement and were applicants in the case; and that the proposed agreement preserved for all parties the "right of independent action," and, "of course," left with the commission "full authority to correct abuses upon its own motion or upon complaint of any party aggrieved."

"HARRY S. TRUMAN" BRIDGE WINS DESIGN AWARD.—In a special ceremony at the University Club in Chicago on May 24, the American Institute of Steel Construction presented a "design award" to the owners, engineers and fabricators of the "Harry S. Truman" bridge, spanning the Missouri river at Kansas City, Mo. (The winning of the award was first announced in the *Railway Age* of November 6, 1948, page 40, which also carried a photograph of the span.) The movable structure was opened to traffic in 1945 by the Chicago, Milwaukee, St. Paul & Pacific and the Chicago, Rock Island & Pacific. In the presentation, N. R. Patterson, president of the institute, stated, "Steel bridges are not only efficient and economical; they can also be beautiful." Present at the speakers' table during the luncheon at which the presentations were made were: (left to right): J. P. Kiley, vice-president—operation, Milwaukee; C. Earl Webb, chief engineer, American Bridge Company (the fabricators); C. H. Buford, president, Milwaukee; Mr. Patterson; J. D. Farrington, president, Rock Island; R. D. Wood, first vice-president, American Institute of Steel Construction; E. E. Howard, Howard, Needles, Tammen & Bergendoff (the engineers), and A. C. Wilby, vice-president, United States Steel Corporation

Vice-President Symes of the P.R.R. subscribed to the Buford statement and gave additional emphasis to some of the points made by the Milwaukee's chief executive. In stressing the need for continued handling of the matters under consideration on a nationwide basis, Mr. Symes suggested that the "only alternative" would be the establishment of car-hire, demurrage and storage rates and rules "through the process of unending litigation" before the commission, "with its attendant heavy expenditure of time and money and the resulting unavoidable delay, not to mention the demoralizing effect upon the national transportation service of constant friction and controversy."

Vice-President DeButts of the Southern also subscribed to the Buford statement, and then went on to explain what the Southern would have to do if it were forced to handle car hire, demurrage and storage on an individual basis. The additional cost of the office work alone would be $100,000 per month, he estimated. Aside from this "enormous additional expense," the result would be "delay, confusion, impairment of the transportation service of the nation," Mr. DeButts said.

President Hood of the Short Line Association appeared for the 231 applicant roads who are members of that association. He called the proposed agreement "absolutely necessary" for the short lines, and "essential to economical utilization of the national car supply." Mr. Hood also expressed his agreement with the statements made by Messrs. Buford, Symes, and DeButts.

The witnesses were cross-examined by Attorney Kilday of the Justice Department, who first moved to have their testimony stricken from the record because, he contended, it embodied only statements of the "hearsay" and "self-serving" variety, and irrelevant references to the history of the procedures under consideration. Examiner Hall denied the motion.

At the outset of the hearing, Mr. Kilday announced that the Department of Justice had not waived its contention that there has been an "overall influence" by the A.A.R. over rate-making organizations and procedures in the three territories. Neither, Mr. Kilday continued, did the department waive its contention that "there is such a similarity in the procedures that the commission should have before it a showing as to those organizations and procedures in the past."

The department's undertaking to introduce material of that kind as evidence in these Bulwinkle-Act proceedings was thwarted by a ruling Commissioner Rogers made at a recent hearing on rate-procedures agreement filed by eastern railroads (see *Railway Age* of May 28, page 43). Last week's hearings on the car-hire, demurrage, and storage agree-

ment was followed by a further hearing on the eastern rate pact. That was before Commissioner Rogers and Examiner Burton Fuller and the department undertook to introduce as evidence additional documents whereby it expected to show that the A.A.R. has participated in rate-making activities of the railroads. These included letters and other material taken from files of the A.A.R. and the territorial traffic associations. The material was assembled into 51 separate exhibits which Mr. Kilday offered as evidence. Commissioner Rogers ruled that all except two were inadmissable, the two which were received being articles of organization and rules of procedure (as of August, 1945) of the Presidents' Traffic Conference—Eastern Territory, and of the Traffic Executive Association—Eastern Territory.

That closed the hearings on the eastern agreement, and Commissioner Rogers announced that briefs would be due September 1 and reply briefs September 20. This proceeding is docketed as Section 5a Application No. 3. In closing the hearing on the car hire, demurrage and storage agreement, Examiner Hall had announced that briefs in that proceeding (Section 5a Application No. 7) would be due July 20, and that reply briefs would be due 20 days thereafter.

A.R.E.A. Elects Hastings To Honorary Membership

By action of the board of direction of the American Railway Engineering Association, Edgar M. Hastings, chief engineer, Richmond, Fredericksburg & Potomac, has been elected an honorary member of that association. At the time of his election, Mr. Hastings was the eighth honorary member, but the number has since been reduced to seven by the death on April 12 of C. A. Morse, formerly chief engineer of the Chicago, Rock Island & Pacific. Mr. Hastings has been a member the A.R.E.A. since 1912. He was elected a director in 1932, was advanced to vice-president in 1937, assumed the presidency in 1939, and following the completion of his term as president in March, 1940, continued as a member of the board of direction in the capacity of past-president until March, 1948. To be eligible for honorary membership in the A.R.E.A. a person must have achieved "acknowledged eminence in railway engineering or management."

Northern Pacific Train Radio In Service Over Cascade Mts.

The Northern Pacific, on June 6, inaugurated end-to-end train radio communication service on its through mainline freight trains over the Cascade mountains. The new installations—which have been made in 13 Diesel road locomotives and 11 cabooses in service on an entire subdivision between Auburn, Wash., and Yakima, 139 mi.—will facilitate operation particularly during adverse weather.

Ground radio stations have been erected at Auburn and Yakima for communication with trains approaching or departing from terminals. All radio sets operate on either of two frequencies—one for end-to-end communication and the other for communication between fixed points and trains.

M. P. Halts Major Overhauling Of Steam Locomotives at K. C.

The Missouri Pacific has discontinued making extensive repairs to steam locomotives at its Kansas City (Mo.) shops, and has transferred this work to M. P. shops at Sedalia, Mo., and North Little Rock, Ark. A reduction in business volume and the transition to Diesel power were given as the reasons for the change.

Depreciation of Rail Securities Threatens "American Way"

Charging that the "shocking depreciation" in the value of railroad securities, plus the approaching "collapse" of railroad passenger service, constitutes a "threat to our American way of life," Robert R. Young, chairman of the board of the Chesapeake & Ohio and chairman of the Federation for Railway Progress, sharply criticized government policies toward the railroads in an address delivered on June 7 at the commencement exercises of the Pennsylvania Military College, Chester, Pa., at which he was awarded an honorary degree of Doctor of Laws.

"Despite waterways and growing competition from airways, highways and pipe lines, demand for rail service in 1948 nearly doubled that of 1938," Mr. Young said in part.

"One would think that in the face of this record demand and remarkable relative economy the railroads would be highly prosperous and well maintained. Such is far from the case. In the 16 peacetime years since 1929 the railroads have arbitrarily and unnecessarily been held down to an average return of 2.87 per cent on property investment. Other far less essential industries earn three to 10 times as much. Average rail dividends by 1939 had shrunk to less than 1½ per cent, about half of what the investor could have earned on government bonds. Not for 20 years have the rails been able to raise money for improvements and extensions through sale of equity securities. . .

"The stock of the New York Central in 1929 sold at $256 per share and paid dividends of $8 per share. Today, rendering vastly greater service, after 16 years of the New Deal, it has declined to $10 a share. This shocking depreciation in the value of the most essential unit of capital on earth, the jugular vein of our industrial empire, standing back, as it does, of our Army and Navy, constitutes a threat to our American way of life, far greater than does any of the multitude of theoretical dangers our Marshall Plan billions are being scattered futilely about to correct. Germany or Japan you can take hold of and lick, given sound railroads, but the corrupt forces of a degenerating capital society cannot be so easily isolated and stamped out.

"Though Congress will again look to the rails in the event of new war, it promiscuously taxes all of us, including the railroads, in order that members may trade off among themselves airports for bus terminals and highways for waterways. Tolls are not charged the users of these tax built facilities because the inadequacy of the revenues that could thus be realized, in relation to the capital cost, would only expose the absurdity of the appropriations.

"Of the postage charged by the government for carrying each letter the railroads are allowed to keep one-half cent, while the airlines, through the influence of a powerful lobby, get five cents, or just 10 times as much. Last year, when the air lines generally operated in the red, their deficits were quickly made up through a special grant of Congress. . .

"Because of this unfair competition from Congress, railroads have now begun to take passenger trains off the rails, wholesale, across the country, seriously aggravating rising railroad unemployment. At least one-half of rail passenger train mileage promises to disappear in the next few years unless other railroads quickly cooperate with the C. & O. in putting its revolutionary new lightweight "Train X" on the rails.

"No one interested in the preservation of private enterprise or in freedom as we have known it can look with complacency upon the coming collapse of rail passenger service. As the rails go, so goes not only industry but defense. Our turban population in its highly complex specialization would become a panic stricken mob to overrun the countryside in its hunger if rail transportation broke down for as much as two weeks. Every manufactory in the country would close. Our troops abroad would be marooned and would fall easily into enemy hands."

R. E. A. to Inaugurate Sales Program August 1

"A hard, two-fisted selling program of planned performance with the objectives of increased business and job security" is the keynote of a national selling program to be inaugurated on August 1 by the Railway Express Agency, according to E. W. Hull, general manager of public relations and sales.

"Let's Look Ahead" is the title of the sales plan, which outlines in detail the subjects to be discussed, the manner in which meetings should be held and the benefits to all employees anticipated from the program. Job security through increased business will be stressed.

The first meetings, to be held August 1 by the four operating vice-presidents, will be attended by general managers, superintendents and other officials. They

in turn will hold regional meetings in their respective territories, until every employee will have an opportunity to attend a meeting.

"Transportation is one of the most highly competitive fields in the business world today. To get our share of the business, every expressman and woman must be on his and her toes, not only to sell the service, but to see that we deliver the high type of service we are selling," Mr. Hull said.

Frank L. Mulholland, Railway Labor Attorney, Dies

Frank L. Mulholland, of Toledo, Ohio, for many years general counsel for the Railway Labor Executives' Association and the Railway Employees' Department of the American Federation of Labor, died of a heart ailment on June 7 at Lake Placid, N. Y., where he was attending an assembly and institute of Rotary International, of which he was a past president.

Born at Disco, Mich., in 1875, Mr. Mulholland was graduated from Albion College and received his law degree from the University of Michigan. As a member of the law firm of Mulholland, Robie & McEwen, of Toledo, he participated during the early nineteen hundreds in many legal cases involving the growth of the organized labor movement; and in later years devoted a great deal of his practice to cases concerning the application of federal railway labor legislation.

Senate Passes O'Mahoney Bill To Legalize Freight Absorption

Proposed legislation to legalize the absorption of freight charges by sellers undertaking to reach distant markets was passed by the Senate on June 1. The proposal, embodied in a bill sponsored by Senator O'Mahoney, Democrat of Wyoming, is designed to eliminate the confusion which has resulted from the Supreme Court's April 26, 1948, decision upholding the Federal Trade Commission's "cease and desist" order against the cement industry's basing-point system of pricing.

The Senate's favorable action on the bill, which proposes permanent amendments to the Federal Trade Commission and Clayton acts, came as a surprise, because action had been expected only on stop-gap legislation, i.e., a bill introduced by Senator Myers, Democrat of Pennsylvania, to provide a two-year moratorium with respect to the application of anti-trust laws to "individual, good-faith delivered price systems and freight-absorption practices."

During the course of the debate on this "moratorium" bill Senator O'Mahoney offered his bill as an amendment in the form of a substitute. The Senate accepted the substitute and then proceeded to pass it without a record vote. This procedure resulted in giving the "moratorium" bill's number—S.1008—to the O'Mahoney bill, which had been introduced as S.1974. It thus went to the House, where it was r ferred to the committee on judiciary, a subcommittee of which held a hearing on it this week.

CINCINNATI BANK HAS "RAILROAD ROOM"—The First National Bank, Cincinnati, Ohio, has set aside a conference room as a "Railroad Room" in recognition of the close relationship between it and the railroads doing business in Cincinnnati. Hanging on the walls of the room are photographs of presidents of leading railroads serving the city, and a collection of model locomotives and streamline trains is on display. Officers of the bank are here shown inspecting some of the railroad models

The bill's proposed amendments to the Federal Trade Commission Act include one stipulating that it shall not be an unfair method of competition or an unfair trade practice "for a seller, acting independently, to quote or sell at delivered prices or to absorb freight," provided, however, that "this shall not make lawful any combination, conspiracy, or collusive agreement, or any monopolistic, oppressive, deceptive, or fraudulent practice, carried out by or involving the use of delivered prices or freight absorption."

The proposed amendments to the Clayton act stipulate that it shall not be an unlawful discrimination in price for a seller, "acting independently," to "quote or sell at delivered prices if such prices are identical at different delivery points or if differences between such prices are not such that their effect on competition may be that prohibited" by other provisions of the act. Likewise, it would be stipulated that it shall not be unlawful discrimination in price for a seller, "acting independently," to "absorb freight to meet the equally low price of a competitor in good faith (except where the effect of such absorption of freight will be to substantially lessen competition), and this may include the maintenance, above or below the price of such competitor, of a differential in price which such seller customarily maintains."

Other provisions of the bill place upon one accused of discriminatory pricing the burden of showing justification for the practices complained of; and "unless justification shall be affirmatively shown," the F.C.C. "is authorized to issue an order terminating the discrimination." In this connection there is a proviso stipulating that a seller "may justify a discrimination (other than a discrimination which will substantially lessen competition) by showing that his lower price. . .was made in good faith to meet an equally low price of a competitor. . ."

Roads Well Prepared For Wheat Movement

"More and better box cars, more motive power and enlarged and more modern yard facilities at terminals will be available to transport this year's bumper wheat crop in the southwest," Ralph E. Clark, manager of the Closed Car Section, Car Service Division, Association of American Railroads, said in a recent statement. He added that the railroads will thus be able this year to move more grain with fewer cars.

New unloading equipment in some elevators will now permit a box car to be emptied in one-third of the former time, Mr. Clark explained. Besides this, he stated, there are more box cars on the principal southwestern railroads handling winter wheat than a year ago. This includes 13,000 box cars now conditioned and assembled alongside country loading stations waiting for the wheat movement, a thousand more cars than last year at this time.

At the same time, Mr. Clark warned, storage facilities in the winter wheat belt were more than half full of grain held over from last year's harvest, in addition to a heavy carry-over of grain on farms and at country elevators. The movement of this old grain, along with the present crop of winter wheat, will create an unusually heavy impact on storage facilities of every type, he added.

As in past years, the railroads will set up temporary headquarters at Kansas

City, Mo., to supervise car supply and service handling the wheat crop throughout the southwest. Assistants will also be located at the terminals of Fort Worth, Tex., and Amarillo; Enid, Okla.; Wichita, Kans., Hutchinson and Salina; Kansas City, Mo., St. Louis and St. Joseph; and Omaha, Nebr.

Regardless of the situation which arises at the height of the harvest, Mr. Clark emphasized, the railroads are ready to move all grain for which proper storage space is available at terminal mills and elevators or at port elevators.

Wins C. & O. Essay Contest

First prize in the Chesapeake & Ohio's National Father's Day essay contest, described in *Railway Age* of March 19, page 127, has been awarded to Ronald Butler, 14, of Point Pleasant, W. Va. The prize, a $100 savings bond and a seven-day all-expense tour for the winner and his father to historic points on C. & O. lines, was for an essay on How Can Fathers Help Make Us Better Citizens. Second prize in the national contest, which was conducted through high school English classes, went to Nick Ryan, of Missouri Valley, Iowa, and third prize to Barbara Jean Allen, Richmond, Va.

Freight Car Loadings

Loadings of revenue freight in the week ended June 4, which included the Memorial Day holiday, totaled 698,824 cars, the Association of American Railroads announced on June 9. This was a decrease of 86,000 cars, or 11.0 per cent, under the preceding week, a decline of 122,382 cars, or 14.9 per cent, under the corresponding week last year, and a drop of 201,923 cars, or 22.4 per cent, under the equivalent 1947 week.

Loadings of revenue freight for the week ended May 28 totaled 784,824 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, May 28, 1949

District	1949	1948	1947
Eastern	138,673	161,210	146,116
Allegheny	164,590	193,833	177,088
Pocahontas	64,806	76,574	72,174
Southern	116,605	139,811	130,778
Northwestern	128,049	136,678	126,313
Central Western	115,432	130,973	116,805
Southwestern	56,669	65,678	60,931
Total Western Districts	300,150	333,329	304,049
Total All Roads	784,824	904,757	830,205
Commodities:			
Grain and Grain products	49,469	43,121	39,684
Livestock	8,745	11,838	11,008
Coal	160,798	203,363	175,858
Coke	13,161	15,010	13,707
Forest products	40,904	46,727	43,132
Ore	79,037	82,475	80,560
Merchandise l.c.l	93,178	108,337	105,171
Miscellaneous	339,532	393,886	361,085
May 28	784,824	904,757	830,205
May 21	773,911	879,177	890,605
May 14	771,736	846,945	888,208
May 7	768,337	880,287	884,242
April 30	785,444	891,115	882,574
Cumulative total 21 weeks	15,132,526	16,547,364	17,438,693

In Canada.—Carloadings for the week ended May 28 totaled 66,163 cars, compared with 73,500 cars for the previous week, and 69,698 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
May 28, 1949	66,163	31,917
May 29, 1948	69,698	32,763
Cumulative totals for Canada:		
May 28, 1949	1,517,078	668,191
May 29, 1948	1,550,589	752,157

Burtness to Adjustment Board

Harold W. Burtness, former president of the Chicago Great Western at Chicago, has been appointed a carrier member, First division, National Railroad Adjustment Board, succeeding Harold J. Hoglund, who has returned to the Chicago, Burlington & Quincy as assistant vice-president. Mr. Burtness resigned the presidency of the Great Western in September, 1948.

Davidson Nominated to Head Locomotive Inspection Bureau

President Truman on June 6 sent to the Senate his nomination of Edward H. Davidson for the directorship of the Bureau of Locomotive Inspection, Interstate Commerce Commission. Mr. Davidson, who is assistant director of the bureau, would succeed John M. Hall, whose retirement from the directorship was noted in the *Railway Age* of June 4, page 56.

As successor to Mr. Davidson in the assistant directorship, the President nominated James E. Friend, who is now a district inspector of the bureau with headquarters at Memphis, Tenn. The nominations were referred to the Senate committee on interstate and foreign commerce.

Preparations for 1949 Railroad Fair are Nearing Completion

With but two weeks remaining before the 1949 Railroad Fair opens its gates on Saturday, June 25, men and mechanized equipment are now engaged in the final phases of construction at the exhibition's lake front site in Chicago. The last spike has been driven in the relaying of several miles of standard-gage track, a thousand new seats have been added to the "Wheels-A-Rolling" pageant grandstand, and frameworks are rising for the last of the new structures to occupy the mile-long area.

The north end of the 50-acre site will sport a "new look" this summer in the form of a 1,200-seat grandstand for the free Ice Show sponsored by makers of railroad equipment and supplies (see *Railway Age* of May 28, page 49). Other new attractions at this location include a movie theatre of the Atchison, Topeka & Santa Fe, a special events arena and a new restaurant.

Nearing completion is the Moffat Tunnel exhibit, which will be finished in the same red rock blasted from the mountains of the Continental Divide where the original tunnel was cut. Track has been laid for the San Francisco cable car, which is to carry passengers on a free ride down a slope to Lake Michigan and around the Cable Car Inn. Historic trains which will take part in the pageant are arriving daily to receive their final polish for participation in the vivid re-enactment of transportation covering a period of nearly 300 years.

The committee of railroad suppliers which has raised $150,000 for the Ice Show includes Thomas Drever (chairman), American Steel Foundries; W. A. Callison, American Locomotive Company; Harold V. Engh, Pyle-National Company; A. A. Frank, Standard Railway Equipment Manufacturing Company; George Hannaway, T. J. Moss Tie Company; George B. Harrington, Chicago, Wilmington & Franklin Coal Co.; J. S. Hutchins, Ramapo Ajax Division, American Brake Shoe Company; F. A. Poor, Poor & Co.; J. H. Rodger, Oxweld Railroad Service Company; and H. J. Watt, Carnegie-Illinois Steel Corp.

16-hr. Schedules for "General" And "Commodore Vanderbilt"

The Pennsylvania's "General," all-Pullman train between New York and Chicago, will begin a faster schedule on June 26 to match the 16-hr. running time of the road's "Broadway Limited." The "General" will be re-equipped with new all-private room sleeping cars and lounge and master twin-unit dining cars. Operating one hour in advance of the "Broadway Limited" in both directions, the new "General" will leave New York at 5 p.m., Eastern daylight time, and arrive in Chicago at 8 a.m., Central daylight time. Departures from Chicago will be at 3:30 p.m.,c.d.t., with arrival in New York at 8:30 a.m., e.d.t.

The New York Central has announced that the running time of its New York-Chicago "Commodore Vanderbilt" will be cut to 16 hours each way, effective June 19. Under the new schedule the westbound "Commodore Vanderbilt" will leave New York daily at 5:30 p.m., e.d.t., and arrive in Chicago at 8:30 a.m., c.d.t. Its eastbound twin will leave Chicago at 4:15 p.m., c.d.t., and reach New York at 9:15 a.m., e.d.t.

Senate Gets "Self-Liquidating" St. Lawrence Seaway Proposal

A new resolution to approve the United States-Canada agreement for the development of the St. Lawrence river has been introduced in the Senate with provisions contemplating the charging of "reasonable" tolls for the purpose of making the proposed seaway "self-liquidating." The resolution, S.J.Res.99, was introduced by the Senate's majority leader, Senator Lucas, Democrat of Illinois, on behalf of himself and a bipartisan group of 18 other senators.

The latter are Senators Wagner of

New York, Douglas of Illinois, Humphrey of Minnesota, Magnuson of Washington, Thomas of Utah, Kefauver of Tennessee, Democrats, Vandenberg and Ferguson of Michigan, Wiley and McCarthy of Wisconsin, Langer and Young of North Dakota, Aiken of Vermont, Thye of Minnesota, Tobey of New Hampshire, Morse of Oregon, Knowland of California, and Hickenlooper of Iowa, Republicans.

A statement by Senator Lucas explained that the resolution is the same as one introduced in 1947 by Senator Vandenberg and reported favorably from the Senate committee on foreign relations in January, 1948. Shortly thereafter, the Senate shelved that resolution by sending it back to the committee, where it died with the sine die adjournment of the 80th Congress.

Under the terms of the present resolution, construction of the seaway would be permitted to go ahead while arrangements for the charging of tolls were being worked out; and the maximum permissible toll charge would be the equivalent of $1.25 per short ton of laden cargo. Moreover, the proposal to charge tolls would not apply to the present navigation facilities within the Great Lakes system, but only to the new deep-water facilities on the St. Lawrence, which would be authorized by the resolution. The tolls provisions also stipulate that the charges "shall give due consideration to encouragement of increased utilization of the navigation facilities, and to the special character of bulk agricultural, mineral, and other raw materials"; and that the tolls "shall vary for ships in ballast and according to the character of cargo with the view that each classification of cargo will so far as practicable derive relative benefits from the use of these facilities."

On June 7 a similar resolution was introduced in the House of Representatives by Representative Dingell, Democrat of Michigan. It is H.J.Res.271.

May Employment

Railroad employment increased 1.83 per cent—from 1,215,212 to 1,237,460—from mid-April to mid-May, but the mid-May total was 6.34 per cent below that of May, 1948, according to the preliminary summary prepared by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission. The index number, based on the 1935-1939 average as 100, was 121.7 for May, as compared with 121 for April and 130 for May, 1948.

May employment was above that of the previous month in three groups while decreases were shown for four groups. The largest increase, 11.02 per cent, was in the maintenance of way and structures group; the other two were in the group embracing executives, officials, and staff assistants (0.06 per cent), and in the transportation group embracing yardmasters, switchtenders, and hostlers (0.83 per cent). The four decreases were all less than one per cent, except the drop of 1.8 per cent in the group embracing transportation employees, other than those in train, engine, and yard service.

As compared with May, 1948, there were decreases in all groups except that embracing executives, officials, and staff assistants, which was up 0.04 per cent. The decreases ranged from 2.57 per cent for the transportation group embracing yardmasters, switchtenders, and hostlers, and the maintenance of way and structures group, to 9.34 per cent for the group embracing transportation employees other than those in train, engine, and yard service.

Fairbanks, Morse & Co. recently dedicated new headquarters for its Los Angeles (Cal.) branch, comprising a modern office and a warehouse equipped with the latest time and labor-saving equipment for handling heavy machinery

ORGANIZATIONS

P. & S. Division Program

The following program has been announced for the twenty-third annual meeting of the Purchases and Stores Division of the Association of American Railroads, to be held June 27-28-29, at the Palmer House, Chicago:

MONDAY, JUNE 27

Morning session—10 a.m. to 12:30 p.m.
(All meetings Chicago city time)
Call to order—Chairman H. E. Warren, vice-president, Gulf, Mobile & Ohio.
Invocation.
Address: I. B. Tigrett, president, G.M.&O.
Address: J. H. Aydelott, vice-president, Operations and Maintenance Department, A.A.R.
Address: Mr. Warren.
Communications.
Appointment of committees (Resolutions and Memorials)
Action on minutes of 1948 annual meeting.
Report of General Comittee.

Reports of:
Subject 1—Purchasing and Stores Department Manual—Recommended Rules and Practices.
(C. D. Longsdorf, general storekeeper, New York Central.)
Subject 2—Standard Material Classification.
(F. J. McNulty, assistant to general storekeeper, Boston & Maine.)
Subject 5—Forest Products.
(C. S. Burt, assistant to vice-president, purchases and stores, Illinois Central.)

Afternoon Sesson—2 p.m.

Report of:
Subject 9—Fuel—Coal, Fuel Oil and Diesel Fuel Oil.
(E., S. Bonnet, fuel purchasing agent N.Y.C.)
Address: Admiral Harold B. Miller, director, department of Information, American Petroleum Institute

Reports of:
Subject 3—Scrap-Handling and Preparation—Classification and Sale.
(R. E. Godley, assistant manager of stores, I.C.)
Subject 3A—General Reclamation.
(John Voorhies, superintendent, scrap and reclamation, N.Y.C.)
Subject 8—Shop Manufacturing.
(C. R. Wheeler, division storekeeper, Baltimore & Ohio.)

TUESDAY, JUNE 28

Morning Session—10 a..m. to 12:30 p.m.
Annual Essey Contest Committee: (B. T. Adams, general storekeper, I.C.)

Report of:
Subject 12—Purchasing Department—Organization and Procedure.
(S. R. Secor, assistant general purchasing agent, Chesapeake & Ohio.)
Address: J. E. Goodwin, vice-president and executive assistant to president, Chicago & North Western.

Reports of:
Subject 13—Stationery and Printing.
(G. W. Kendall, stationery buyer, Atchison, Topeka & Santa Fe.)
Subject 14—Fire Prevention, Safety Practices, Insurance—Purchasing and Stores Department.
(E. J. Urtel, division storekeeper, B.&O.)

Afternoon Session—2 p.m.

Reports of:
Subject 15—Storage and Material Handling Facilities—Capacity Loading and Prompt Handling of Company Material Cars.
(E. G. Roberts, stores manager, Chicago, Rock Island & Pacific.)
Subject 16—Simplification and Standardization of Stores Stock.
(R. W. Hall, traveling storekeeper, Louisville & Nashville.)
Remarks: W. S. Morehead, manager of stores, I.C.
"The Importance of Application of the Recommendations of Division."

Report of:
Subject 37—Stores Department—Organization and Procedure.
(W. W. Shugarts, assistant stores manager, Pennsylvania.)

WEDNESDAY, JUNE 29

Morning Session—10 a.m. to adjournment.

Reports of:
Subject 42—Diesel Locomotive Parts—Purchasing and Storekeeping.
(A. G. Bohorfoush, assistant general purchasing agent, Southern.)
Subject 40—Loss & Damage Prevention—Salvage and Disposition.
(J. L. Layton, stores inspector, P.R.R.)
Address: Lewis Pilcher, executive vice-chairman, Freight claim division, A.A.R.

Report of:
Subject 34—Maintenance of Way and Construction Materials (Including Signal, Telephone and Telegraph)—Purchasing. Storing and Distribution.
(E. Bartos, general traveling storekeeper, A.T.&S.F.)

Reports of:
Resolutions Committee:
Memorials Committee:
Nominating Committee:
Election of officers.
Introduction of new chairman and vice-chairman.

Adjournment

A.S.T.M. to Hold Annual Meeting at Atlantic City

Beginning Monday, June 27, and extending through Friday of that week, the American Society for Testing Materials will hold its fifty-second annual meeting at Atlantic City, N. J. The official program provides for 22 technical sessions comprising over 100 papers or formal or informal discussions, and some 350 committee meetings. A number of the sessions will deal with subjects of direct or indirect interest to railroad men, such as radiography and ultrasonic testing, fatigue of metals, soils, testing wood poles, paint, wood, concrete, thermal insulating materials, and cementitious materials.

Other activities will include a luncheon session on Tuesday, June 28, an informal dinner on Wednesday, and the Edgar Marburg lecture on Tuesday evening, which will be delivered this year by W. M. Baldwin, Jr., research professor and director, metals research laboratory, department of metallurgical engineering, Case Institute of Technology, Cleveland, Ohio.

The **Traffic Club of Minneapolis, Minn.,** has elected the following officers for the coming year: President, J.R. Brown, district passenger agent, Pennsylvania; vice-president, Howard A. Schultz, city freight agent, Northern Pacific; secretary, Rowland E. Dobbins, traffic manager, Northrup, King & Co.; and treasurer, B. W. Heckman, traffic department manager, Land O'Lakes Creameries Inc.

The **Transportation Association of America** has moved its Eastern area public relations office from 143 Liberty street, New York, to Suite 1201, 441 Lexington avenue, New York 17. Headquarters of the association's national cooperative project will continue at the offices of Dorr, Hammond, Hand & Dawson, 61 Broadway, New York 6.

OVERSEAS

Trouble in Paradise

Various sections of railroad labor in Great Britain have been expressing dissatisfaction lately with current wage rates and operating rules on the recently nationalized railroad system. Last Sunday was the third in succession that locomotive crews in the northeastern and eastern sections of the county refused to work as a protest against a summer increase in the number of "lodging turns" —work schedules under which workers spend occasional nights away from home. Freight handlers at certain stations have adopted "go slow" methods to register disapproval at the alleged slowness with which claims for pay increases are being handled by the National Railway Executive. Neither the work stoppages nor the "slow downs" have been officially sanctioned by union officials, who are reported to have asked the dissident workers to return to normal working. The Railway Executive has said it will not negotiate until the strikes and slowdowns are called off. If normal conditions are restored, the Executive said, it will begin discussion of the entire range of grievances.

SUPPLY TRADE

Richard D. Durrett, whose appointment as sales manager—Diesel locomotive sales of the **Baldwin Locomotive Works** was announced in the *Railway Age* of May 21, page 194, was graduated from the New York State Merchant Marine Academy as a marine engineer. He worked as assistant engineer of the Cleveland Cliffs Iron Company from 1938 to 1940; as installation superintendent of the Iron Firemen Manufacturing Company dur-

Richard D. Durrett

ing 1940 and 1941; and as coordinating engineer for the Lewis Welding & Engineering Corp. in 1941 and 1942. In 1942 he joined the United States Navy as an ensign and held the rank of lieutenant at the same time of his discharge in 1945. Mr. Durrett joined Baldwin on April 3, 1946, as sales engineer, and on February 1, 1948, was appointed acting manager of Diesel product sales, which position he held until his recent promotion.

The **Simmons-Boardman Publishing Corporation,** publishers of *Railway Age* and other railroad periodicals and books, has moved its Chicago office from 105 West Adams street to 79 West Monroe street, Chicago 3. The telephone number continues to be Randolph 6-0794.

The **Spring Packing Corporation** has moved from 122 South Michigan avenue, Chicago, to new quarters at 332 South Michigan avenue in that city. The announcement of this change in *Railway Age* of June 4 erroneously listed the firm as the Chicago Packing Corporation.

John F. Ducey, Jr., and **S. R. Watkins** have been appointed district sales managers of the brake shoe & castings division of the **American Brake Shoe Company,** with headquarters at New York and

John F. Ducey, Jr.

Cleveland, Ohio, respectively. Mr. Ducey joined Brake Shoe in 1936 as an apprentice, after he was graduated from Harvard University. During World War II he served as an officer in the United States Navy and was a commander at

S. R. Watkins

the time of his release. Mr. Watkins began his association with the company as an apprentice after he was graduated from Yale University in 1939. He served with the United States Army during the war and was released from service with the rank of major.

Arthur H. Dutton, Diesel inspector of the Union Pacific, has been appointed western representative for the **Paxton-Mitchell Company** and the **Paxton Diesel Engineering Company,** Omaha, Neb., succeeding the late **James C. Peugh.**

The **Thew Shovel Company,** Lorain, Ohio, which has grown since its incor-

poration in 1899 to five plants employing 1,500 workers, will celebrate its 50th anniversary on July 17. The firm's history actually began four years earlier in 1895, when Captain Richard P. Thew, then captain of an ore-carrying lake boat, designed and built the first Thew shovel.

The **Air Reduction Company,** New York, has announced the opening of a new oxygen plant at Flint, Mich., built at a cost of more than $250,000. In addition to the manufacture of oxygen, the new facility will be a supply point for acetylene gas and welding equipment and supplies.

The **Independent Pneumatic Tool Company** recently constructed four new factory branch sales and service buildings at 1405 West Washington boulevard, Chicago; 32-34 Greenpoint avenue, New York; 204 Thomas street, Pittsburgh, Pa.; and 1909 Davenport road, Toronto, Ont. The new buildings replace previous office sites in the same cities. The export division will continue to be located at 330 West 42nd street, New York.

Fred C. Schultze, formerly assistant sales manager of the **Waukesha Motor Company,** Waukesha, Wis., has been ap-

Fred C. Schultze

pointed sales manager. Mr. Schultze joined the company in 1928 and was active in various departments, including purchasing and plant engineering, before he joined the sales department.

The **Westinghouse Electric Corporation** has announced the elections of **James H. Jewell,** manager of apparatus sales, and **John M. McKibbin,** assistant to vice-president and manager of advertising and sales promotion, both of Pittsburgh, Pa., as vice-presidents, and of **Herbert P. MacDonald,** treasury manager in the eastern district office at New York, as assistant treasurer. Mr. MacDonald also has been appointed credit manager, with headquarters in Pittsburgh.

J. N. Albertson, carrier sales staff engineer for the **Automatic Electric Sales Corporation,** Chicago, has been transferred to the San Francisco, Cal., office, to engage in sales engineering activities on Lenkurt carrier equipment, for which Automatic Electric is distributor.

John E. Carroll has been appointed general sales manager of the **American Hoist & Derrick Company,** St. Paul, Minn. Mr. Carroll was graduated in engineering

John E. Carroll

from the University of Minnesota and joined American Hoist in 1937 as a district sales representative, covering the Texas, Chicago and West Coast territories, successively.

F. W. Dickerson, formerly manager of telephone sales at Richmond, Va., for the **Graybar Electric Company,** has been appointed manager of communication equipment sales, with headquarters at New York.

The **Homelite Corporation,** Port Chester, N. Y., has opened a new branch office in Pittsburgh, Pa., to cover western Pennsylvania, West Virginia and eastern Ohio, territory formerly covered by the Koontz Equipment Corporation. The new office is located at 810 Ridge avenue, with **William B. Livingston** in charge.

J. G. Haskell has been appointed field representative of the merchandise sales, sound division, of the **Webster Electric Company,** Racine, Wis. Mr. Haskell formerly worked as replacement sales manager of Tuttle & Kift and as service manager of the appliance division of the General Electric Supply Company.

J. D. Greensward has been appointed general manager of the Norwood (Ohio) works of the **Allis-Chalmers Manufacturing Company.**

Curtis C. Gary has been appointed assistant to the president of the brake shoe & castings division of the **American Brake Shoe Company,** with headquarters at New York. Mr. Gary joined Brake Shoe in 1942 and has been assistant to the vice-president in charge of division sales since 1947.

Theron Howard, head of tractor sales and service in the eastern division of the **Hyster Company** since 1941, has been appointed manager of the Peoria, Ill., plant, and **J. F. Lewis,** formerly in charge of production and purchasing at the Peoria plant, has been transferred to Portland, Ore., as chief production engineer.

OBITUARY

Richard Sheridan, recently retired president of the John B. Astell Company, died on May 22, at the Johns Hopkins Hospital, Baltimore, Md. Mr. Sheridan formerly worked successively on the Boston & Maine, the New York, New Haven & Hartford, and as eastern sales representative of the Chicago Railway Equipment Company.

John H. Jaschka, formerly district sales manager at St. Louis, Mo., for the Nation Malleable & Steel Castings Co., died on May 22, at his home in Clayton, Mo. Mr. Jaschka joined the company at Indianapolis, Ind., in 1901, and shortly afterward transferred to the engineering department in Cleveland, Ohio. In 1904 he opened the San Francisco, Cal., sales office of the company and remained there until 1919, when he was again transferred to Cleveland on special duty. He was appointed district sales manager at St. Louis in 1931, a position which he held until his retirement in May, 1948.

James C. Peugh, western representative of the Paxton-Mitchell Company, died on May 27, at Omaha, Neb.

CONSTRUCTION

Chesapeake & Ohio.—The Pere Marquette district of this road has awarded contracts to the Stefco Company for the construction, at Muskegon, Mich., of a steel Diesel house which, together with some 1,295 ft. of track, will cost an estimated $45,500; and for the erection of a corrugated iron warehouse and transfer dock at Ludington, Mich., at a cost of approximately $30,000. Miscellaneous building and track work in connection with the latter project will cost an additional $8,000.

Chesapeake & Ohio.—This road has awarded contracts at the indicated estimated costs to the Wise Contracting Company, Richmond, Va., for service buildings for coal pier 14 at Newport News, Va. ($152,000), and to the Smith Construction Company, Huntington, W. Va., for grading for tracks to serve coal mine developments at United, W. Va. ($12,000), Fanco and Accoville ($14,850). Also, the road has authorized, at the indicated probable costs, the construction of track to serve coal mine developments at United ($38,450), Fanco and Accoville ($167,900), Thealka, Ky. ($66,600), and Kite ($25,600). The

projects in Kentucky will be undertaken by the road's own forces.

Northern Pacific. — This road has awarded the following contracts, the estimated costs of which are shown in parentheses: To J. W. Rumsey & Co., Seattle, Wash., for the replacement of timber with reinforced concrete in pedestrian subway under train tracks and concourse retaining wall at the Spokane (Wash.) passenger station ($225,000); to the James Construction Company, Seattle, for replacement of timber trestle approach and piers with concrete abutments, and for shifting present 90-ft. through plate girder span over Bear creek, bridge No. 107, near Bovard, Idaho ($35,000); to the Souther Construction Company, St. Paul, Minn., for the reconstruction of underpass at Edgerton street, St. Paul ($40,000); to Fielding & Shepley, Inc., St. Paul, for replacement of timber Howe trusses and piers with second hand steel truss and girder spans on concrete sub-structure, bridge No. 51 over Bitterroot river, near Hamilton, Mont. ($130,000); to Clifton & Applegate Co., Spokane, for reconstruction of bridge No. 97.1, over Touchet river, near Dayton, Wash. ($75,000); and to J. D. Harrold Company, Duluth, Minn., for the construction in that city of a one-story yard office building at Rice's Point yard and a carmen's service building for the Duluth Union Depot & Transfer Co. (subsidiary of N. P.) ($85,000).

EQUIPMENT AND SUPPLIES

SIGNALING

The **Canadian National** has ordered materials from the General Railway Signal Company for installation of Type K, 2-wire centralized traffic control on 115 mi. of single track between West Junction, Que., and St. Rosalie yard. The control machine, to be located at Levis, 124 mi. from St. Rosalie yard, will have a 174-in. control panel equipped with 92 track indication lights, a self-inking pen recorder and 94 levers for control of 43 switch machines, 6 spring switches and 177 signals. This installation will use a carrier link control system, with the carrier converter at Aston Junction, 72 mi. from Levis. The order also includes type K relays, model 5D dual-control electric switch machines, type SA searchlight signals, and welded steel instrument cases.

FREIGHT CARS

9,525 Freight Cars Delivered in May

Freight-train cars for domestic use delivered during May totaled 9,525, including 2,646 delivered by railroad shops, compared with April deliveries of 10,787 (revised), which included 2,288 delivered by railroad shops, the American Railway Car Institute has announced. May deliveries included 921 box cars, 4,477 hopper cars, 2,319 gondola cars, 679 refrigerator cars, 493 tank cars and 636 cars of other types.

Freight-train cars ordered last month for domestic use amounted to 589, compared with April orders for 30. In both months all orders were placed with contract builders. Freight-train cars for domestic use on order and undelivered on June 1 numbered 52,281, including 24,350 on order from railroad shops, compared with 62,369 on order May 1 and 127,689 on order June 1, 1948.

ABANDONMENTS

Applications have been filed with the Interstate Commerce Commission by:

Chicago, Burlington & Quincy.—To abandon its 4.9-mi. branch line between Sedan, Iowa, and Moulton, and its operation under trackage rights over the Wabash between Moulton and Bloomfield, 14.1 mi.

International.—To abandon its freight operations, which provide service between North Tonawanda, N. Y., and Lockport and which are conducted under trackage rights over 13 mi. of Erie line between those points and 0.9 mi. of New York Central line in Lowertown and Lockport, and 4 mi. of the applicant's lines in Lockport. Authority to abandon the latter is also sought in the application which said that the freight business has declined to the point where it now accounts for less than 1.5 per cent of the applicant's gross revenues. The applicant's principal operations provide local passenger service in and between Buffalo and Niagara Falls.

Division 4 of the I.C.C. has **authorized:**

Pacific Electric.—To abandon the end portion of its Los Angeles-Glendale-Burbank line, approximately 0.3 mi. in length, in Burbank, Cal.

FINANCIAL

Alleghany Corporation. — *Notes.* — Division 4 of the Interstate Commerce Commission has authorized this company to issue a promissory note for $9,000,000 to be delivered to the Manufacturers Trust Company, New York, in exchange for a matured note of like amount; and to modify a promissory note of $15,000,000 which is payable to the Chase National Bank of New York. June 1 was the maturity date of the $9,000,000 note for which the new note will be substituted. The latter will be dated June 1 and will be payable on June 1, 1956, with provisions for payment or call on 60 days' notice prior to that date. The interest, payable semi-annually, will be at the following annual rates: ¼ per cent above the New York Federal Reserve Bank discount rate, but not less than 1 per cent, on so much of the daily unpaid principal as is secured by cash and United States government obligations at face value; 1½ per cent above such discount rate, but not less than 2½ per cent nor more than 3½ per cent, on so much of the daily unpaid principal as is not so secured. The government obligations now pledged as collaterals exceed the amount of the loan, and the return on them (2.43 to 2.44 per cent) exceeds by 0.69 per cent the applicable interest rate on the loan, the division's report pointed out.

The $15,000,000 loan from Chase was arranged on a similar basis, but the provision for acceptance of government obligations as collateral stipulated that the maturity date on such obligations could not be later than July 3, 1953, the maturity date of the note. The modification approved by the commission permits the pledging of government securities with later maturities, but alters the interest terms if that is done. The new interest terms are: ¼ per cent above the New York Federal Reserve Bank discount rate on so much of the daily unpaid principal amount of the note as is equivalent to the aggregate amount of cash and government obligations (at face amount) maturing not later than July 3, 1953, and ½ per cent above such discount rate on so much of the daily unpaid principal as is equivalent to the aggregate amount of government obligations (at face amount or market value, whichever is lower) maturing after July 3, 1953; but in no event is the interest on that portion of the note thus collateralized to be more than 2½ per cent or less than 1¼ per cent. The interest rate on the portion not so collateralized is 2½ per cent.

Central of New Jersey.—*Modification of Securities.*—This road has filed with the Interstate Commerce Commission proposed amendments to its plan for modifying some of its outstanding securities, and the commission has set the matter for hearing before Examiner John L. Bradford at Washington, D. C., on June 13. The plan, formulated pursuant to the provisions of section 20b of the Interstate Commerce Act (the so-called Mahaffie Act) had already been approved by the commission and submitted to interested security holders for acceptance or rejection when the petition for authority to make the amendments was filed (see *Railway Age* of March 12, page 106). The petition said it had become apparent that holders of a "substantial number" of shares of the affected common stock were unwilling to assent to the plan as submitted.

The amendments propose that holders of the general mortgage bonds will receive 4 shares of the new class A common stock for each $1,000 principal amount of 5 per cent bonds and 1.72 shares for each $1,000 principal amount of 4 per cent bonds, instead of 5.979 shares and 2.565 shares, respectively.

ANNUAL REPORTS

Railroad		Operating Revenues	Operating Expenses	Fixed Charges	Net Income	Current Assets*	Current Liabilities*	Long Term Debt*
Atlantic Coast Line†	1948	$136,336,690	$118,287,514	$3,987,461	$7,684,913	$45,946,939	$25,077,338	$101,687,172
	1947	128,429,922	112,461,791	4,050,995	6,003,953	45,436,055	22,464,407	95,890,654
Lehigh & Hudson River	1948	3,417,715	2,402,879	.....	368,728	1,803,740	548,209	None
	1947	3,060,422	2,313,634	.....	252,299	1,293,825	301,906	None
Louisville & Nashville	1948	207,271,683	169,453,492	6,807,624	18,497,903	103,711,502	32,950,988	$217,357,776
	1947	189,697,168	156,337,231	6,178,695	13,286,947	73,638,347	31,084,619	182,810,881
Mississippi Central‡	1948	2,361,438	1,543,511	68,273	258,298	971,892	417,455	1,000,000
	1947	1,781,131	1,300,293	113,479	61,781	516,028	205,221	2,101,763
Missouri Pacific	1948	221,034,427	166,814,502	17,051,676	13,045,693	92,419,540	37,606,208	359,744,881
	1947	199,622,369	155,122,951	16,827,367	8,271,925	82,779,796	33,053,224	351,252,067
Nashville, Chattanooga & St. Louis	1948	35,528,343	28,869,333	1,439,353	1,783,856	16,903,516	6,068,256	20,755,477
	1947	31,875,843	26,694,053	1,403,269	801,479	15,384,299	5,792,529	19,626,044
New Orleans & Northeastern	1948	12,860,829	6,906,044	324,516	2,449,584	13,578,968	4,631,479	7,195,000
	1947	11,008,098	6,301,207	324,644	1,728,055	9,931,060	3,857,444	7,195,000
New Orleans, Texas & Mexico	1948	46,196,955	31,512,651	2,809,148	4,807,743	15,738,691	9,549,350	64,312,394
	1947	40,357,496	27,811,993	2,792,946	3,729,539	14,301,443	9,311,887	61,428,541
New York, Susquehanna & Western	1948	5,029,182	3,604,509	579,444	692,212d	2,649,068	1,663,689	13,017,398
	1947	4,240,938	3,079,028	633,743	244,844d	3,417,903	1,775,301	13,217,930
Pittsburgh & West Virginia	1948	8,800,480	5,830,444	452,652	1,476,535	3,862,284	2,319,072	11,255,397
	1947	6,835,706	5,202,771	459,301	1,118,912	2,896,067	1,170,795	10,469,700
Richmond, Fredericksburg & Potomac	1948	25,999,807	19,519,640	85,110	2,760,408	8,489,735	4,780,366	3,990,000
	1947	23,926,429	17,649,697	60,305	2,548,917	7,605,845	4,855,478	2,469,000
Tennessee Central	1948	4,752,217	4,060,683	255,332	216,776d	839,388	1,294,846	5,635,085
	1947	4,253,442	3,843,480	238,150	400,999d	986,590	1,301,264	5,421,221
Toledo, Peoria & Western	1948	4,693,736	3,052,048	68,017	798,759	1,632,381	866,777	1,627,235
	1947	1,783,312	1,824,833	65,882	3,684,181d	3,692,105	534,440	1,552,000

*On December 31
†Restated because of printer's error in issue of June 4, 1949
‡Reorganized effective April 1, 1948

They also provide that at the time of exchange of existing securities for new securities, one year's additional interest on the general mortgage bonds will be paid in cash. The effective date of the plan would be changed from January 1, 1949, to July 1, 1949, and the accrued unpaid interest on the bonds as of the latter date would be paid in the interest certificates provided for in the plan. The plan would also be "clarified" with respect to the provision of $4,000,000 for working capital, the callability of the bonds, and the disposition of excess cash as of July 1, 1949.

Chicago, Burlington & Quincy.—*New Kansas City-St. Louis Freight Route.*—Examiner Jerome K. Lyle has recommended in a proposed report that Division 4 of the Interstate Commerce Commission approve the acquisition by this road of trackage rights under which it would use about 158 miles of Gulf, Mobile & Ohio lines between Rock Creek Junction, Mo., and Francis, and thus establish an improved freight route between Kansas City and St. Louis. The lines are those of the Kansas City, St. Louis & Chicago which the G.M.&O. acquired in connection with its acquisition of the Alton. They were also involved in a previous application, denied by the commission, wherein the Burlington sought approval of arrangements similar to those it now proposes, and the Atchison, Topeka & Santa Fe sought to obtain a direct Kansas City-St. Louis line (see *Railway Age* of July 24, 1948, page 101).

The Burlington's present proposal also contemplates acquisition of rights over 0.81 mile of track in the Kansas City terminal area where the K.C.St.L.&C. connects with the Kansas City Terminal. The whole plan, outlined in greater detail in the issue of January 1, page 53, would give the Burlington a 273-mile freight route between Kansas City and St. Louis, 65 miles shorter than its present route via Hannibal, Mo., and Cameron Junction. The new route will "compare favorably" with competing routes of the Missouri Pacific and Wabash, the proposed report said. There has been no railroad opposition to the proposal, the Burlington having stipulated that it would not object to a condition requiring the continuance of existing through routes and joint rates via St. Louis and Kansas City. The examiner would have the commission impose such a condition. He found no necessity for the imposition of labor-protection conditions, since the applicant and G.M.&O. have entered, with the Railway Labor Executives' Association, an agreement calling for application of the so-called Washington Job Protection Agreement to employees who may be adversely affected.

Evidence reviewed in the proposed report indicated that the new route would attract enough additional business to increase the Burlington's gross revenues by approximately $2,646,261 in an "average" year. The additional net income on that basis would be $736,588. The latter, however, would depend on final arrangements with train-service employees; and such arrangements might reduce it by about $31,000, the examiner said. Rental provisions of the agreement stipulate that the Burlington would pay 50 per cent of the interest on K.C.St.L.&C. bonds, 50 per cent of the ad valorem and franchise taxes applicable to most of the line, and 2 per cent annually upon amounts expended by the G.M.&O. for additions and betterments. Maintenance and operating expenses would be divided on the basis of car-mile use of the line, but the proportion payable by the Burlington would be not less than 30 per cent. These rental arrangements would apply to the 156-mile line between Rock Creek Junction and Mexico. For use of the 2-mile line between Mexico and Francis and the terminal tracks at Kansas City, the Burlington will pay per train-mile "an amount equal to the average amount per train mile paid . . . during the same month for use of the Mexico-Rock Creek Junction line."

The cost of rehabilitating the latter would total $3,969,534, according to a table in the proposed report. In addition to improvements already made at a cost of $227,548, this would include $962,432 for signaling facilities and centralized traffic control, $2,679,554 for rail, and $100,000 for "miscellaneous" improvements.

Houston Belt & Terminal.—*Operating Agreement.*—This company and seven other roads serving Houston, Tex., have applied to the Interstate Commerce Commission for approval of various transactions contemplated by agreements they have entered for the purpose of unifying terminal facilities and operations in the

Houston area. Applicants, in addition to the Belt, are: Gulf, Colorado & Santa Fe, subsidiary of the Atchison, Topeka & Santa Fe; Fort Worth & Denver City, subsidiary of the Chicago, Burlington & Quincy; Chicago, Rock Island & Pacific; and four constituents of the Missouri Pacific system, i.e., International-Great Northern, Beamont, Sour Lake & Western, St. Louis, Brownsville & Mexico, and Sugar Land.

Generally, the agreements provide for changes in ownership of the Belt, enlargement of its facilities by lease of properties from the other parties, and greater use by the latter of the Belt as their switching agency. New facilities involved in the proposed plan will cost approximately $3,250,000 and will involve construction of a new yard (see *Railway Age* of April 2, page 58). The proposed changes in ownership of the Belt involve acquisition by the Denver City and the Rock Island of the 25 per cent stock ownership now held by the Burlington-Rock Island, each of the buyers acquiring a 12½ per cent interest. The remaining 75 per cent of the Belt's stock is owned in equal parts by the Beaumont, the Brownsville, and the G.C.&S.F.

Before receiving the application, the commission had received and acted favorably upon a petition of the Rock Island, Burlington-Rock Island, Denver City, and G.C.&S.F., thus staying further proceedings in another pending case which, the petitioners said, might be affected by the proposed unification plan. That other case, in which the petitioners are interveners, involves an application of the Beaumont for authority to construct a 1.6-mi. line in the Houston area and an application of the I.-G.N. for authority to acquire from the Beaumont trackage rights over 4.5 mi. of line, including the proposed new segments. The commission has before it Examiner J. S. Prichard's proposed report recommending approval of these applications (see *Railway Age* of April 2, page 58); but the stay order said that the new unification plan "may render unnecessary the line proposed to be built by the Beaumont . . ." The stay was to remain in effect until the filing of the application for approval of the unification plan, but "subject to the understanding that upon such filing consideration will be given to whether the [Beaumont and I.-G.N.] applications . . . should be reopened for further hearing in connection with a hearing on the [unification-plan] application."

Maine Central.—*Recommends Approval of Stock Adjustment.*—With amendments proposed by a committee representing the interested stockholders, Examiner John L. Bradford would have the Interstate Commerce Commission approve this road's plan for modifying its outstanding preferred stock. The application for approval of the plan was filed under section 20b of the Interstate Commerce Act, which was added by the so-called Mahaffie Act; and the examiner's proposed report recommended that the commission authorize submission of the amended version to interested stockholders for acceptance or rejection.

The stock involved is a 30,000-share issue of 5 per cent cumulative preferred, par value $100 per share, on which no dividends have been paid since December 1, 1931. Thus the unpaid dividends amounted to $85 per share as of December 1, 1948. The plan, as outlined in the road's application, proposed to liquidate this liability by increasing the par value of each preferred share to $185 and making the dividend rate on that amount 4 per cent, the dividends to remain cumulative but to become payable semi-annually instead of quarterly.

The first amendment suggested by the stockholders' committee and recommended by the examiner would provide for the payment in cash of one year's dividend ($5 per share) on the present stock, and thus fix the new par value of $180 per share instead of $185. Two other amendments would continue the 5 per cent dividend rate on the stock, as modified, and the quarterly-payment plan for dividends. In going along with the committee on these matters, Examiner Bradford pointed out that the road's earnings during the past 10 years amounted to about $165 per share on the preferred, but "such earnings were used for additions and betterments . . . and to retire debt." As the proposed report otherwise put it, "applicant in effect borrowed the money available for preferred stock dividends without leave of the preferred stockholders to rehabilitate its railroad."

The stockholders' committee also suggested a change in the voting provisions of the plan, which proposed that the preferred stock be left without voting rights, except that if six semi-annual dividends were unpaid the preferred holders, voting as a group, would have the right to elect two directors at the company's next annual meeting. This proposal contemplated that this voting right would apply at subsequent annual meetings only if six or more semi-annual dividends still remained unpaid. The amendment suggested by the committee would have given the preferred holders and holders of the road's prior preference stock, jointly, the right to elect two directors at all annual meetings; and it would have provided for the election of a majority of the directors by the preferred holders if the dividends on the preferred were in arrears in an amount equal to 15 per cent of the stock's par value. The voting provision recommended by Examiner Bradford would entitle each share of preferred to one vote at all stockholder meetings; and it would permit cumulative voting of the preferred for directors when the dividends were in arrears by 15 per cent of the par value.

Other proposals of the committee were rejected by the examiner. They called for an immediate split of each share of the $180 stock into four shares with a par value of $45 each, sinking-fund arrangements for retirement of the stock so long as the outstanding par value exceeded $3,000,000, and the imposition of a requirement that the stock be listed on the New York Stock Exchange or New York Curb Exchange. The examiner would also have the commission reject contentions of a holder of some of the road's bonds, who intervened in opposition to the application. The recommended finding in that connection was that the plan would not be adverse to the interest of any such creditor of the applicant.

New Securities

Division 4 of the Interstate Commerce Commission has **authorized:**

Delaware, Lackawanna & Western.—To assume liability for $3,150,000 of series I equipment trust certificates to finance in part the acquisition of 7 Diesel-electric freight locomotives, 100 70-ton hopper cars, and 10 passenger cars (see *Railway Age* of May 21, page 196). The certificates will be dated April 1 and will mature in 15 annual installments of $210,000 each, beginning April 1, 1950. The commission's report approved a selling price of 99.0529 with a 2½ per cent interest rate—the bid of Halsey, Stuart & Co., and 4 associates, which will make the average annual interest cost approximately 2.61 per cent. The certificates were reoffered to the public at prices yielding from 1.45 to 2.85 per cent, according to maturity.

Missouri-Kansas-Texas.—To assume liability for $2,550,000 of equipment trust certificates to finance in part eight Diesel-electric freight locomotives (see *Railway Age* of May 14, page 69). The certificates will be dated June 15 and will mature in 30 semi-annual installments of $85,000 each, beginning December 15. The commission's report approved a selling price of 98.524 with a 2¾ per cent interest rate—the bid of Halsey, Stuart & Co., Inc., and associates, which will make the average annual interest cost approximately 2.60 per cent. The certificates were reoffered to the public at prices yielding from 1.35 to 2.8 per cent, according to maturity.

Application has been filed with the I.C.C. by:

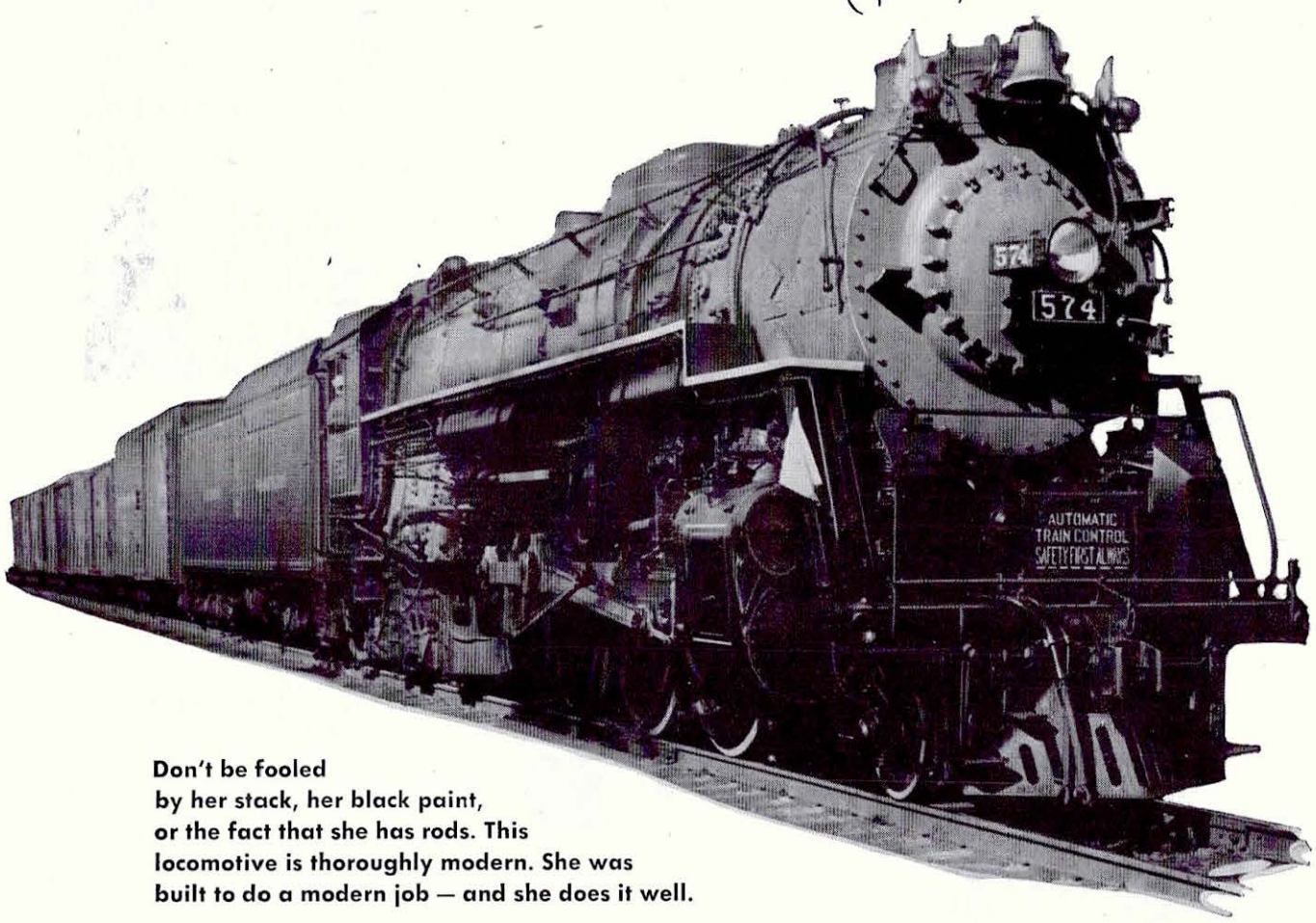
Southern Pacific.—To assume liability for $12,480,000 of series "BB" equipment trust certificates to finance in part the acquisition of the following equipment:

	Description and builder	Estimated Unit Cost
16	6,000-hp. Diesel-electric freight locomotives, consisting of two 1,500-hp "A" units and two 1,500-hp "B" units (Electro-Motive Division, General Motors Corporation	$660,270
2	6,000-hp. Diesel-electric passenger locomotives, consisting of two 2,000-hp. "A" units and one 2,000-hp. "B" unit (American Locomotive Company)	663,833
2	1,500-hp. Diesel-electric road switching locomotives (Baldwin Locomotive Works)	168,407
400	50-ton composite, drop-bottom, general service gondola cars with wooden sides (General American Transportation Corporation)	5,506
40	50-ton composite, tight bottom, gondola cars with wooden sides (American Car & Foundry Co.)	4,203
802	70-ton steel flat cars with wooden floors (A.C.F.)	5,158

Total estimated cost of all of the equipment is $18,735,802. The certificates would be sold on the basis of competi-

News Department continued on next left-hand page

This, too, is a MODERN locomotive



Don't be fooled by her stack, her black paint, or the fact that she has rods. This locomotive is thoroughly modern. She was built to do a modern job — and she does it well.

With planned scheduling she can stay on the road 16 and 18 hours a day, 27 or 28 days a month. With proper servicing — and such servicing facilities save more than they cost — she can be turned around in an hour or two. With her modern design, her maintenance costs are low. And with equal attention, she — the modern steam locomotive — will give you more train-miles, more ton-miles, more passenger-car miles per year for each dollar of investment than any other type of motive power.

There is a place for steam, and in this place the modern steam locomotive is doing an outstanding job.

We are continuing to build such locomotives.

LIMA HAMILTON CORPORATION

DIVISIONS: *Lima, Ohio*—Lima Locomotive Works Division; Lima Shovel and Crane Division. *Hamilton, Ohio*—Hooven, Owens, Rentschler Co.; Niles Tool Works Co. *Middletown, Ohio* — The United Welding Co.

PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

tive bidding, and the interest rate would be fixed by such bids. They would be dated July 1, and mature in 15 annual installments of $832,000 each, beginning July 1, 1950.

Average Prices Stocks & Bonds

	June 7	Last week	Last year
Average price of 20 representative railway stocks	36.54	37.58	54.69
Average price of 20 representative railway bonds	84.28	84.75	89.66

Dividends Declared

Atchison, Topeka & Santa Fe.—preferred, $2.50, payable August 1 to holders of record June 30.

Bangor & Aroostook.—5% preferred, $1.25, quarterly, payable July 1 to holders of record June 13.

Mount Carbon & Port Carbon.—$1.25, semi-annual, payable July 14 to holders of record July 1.

Rochester & Genesee Valley.—$2.00, semi-annual, payable July 1 to holders of record June 20.

Schuylkill Valley Navigation & R.R.—$1.25, semiannual, payable July 14 to holders of record July 1.

RAILWAY OFFICERS

EXECUTIVE

George A. Anderson, comptroller and head of the accounting and treasury departments of the Minneapolis & St. Louis at Minneapolis, Minn., for the past 14 years, has been promoted to vice-president and comptroller. Mr. Anderson, who is a native of Minneapolis, entered rail-

George A. Anderson

road service with the M. & St. L. in 1906 as a clerk. He has served in supervisory posts in the accounting department since 1918, when he was appointed auditor of disbursements. In 1935 he became comptroller, the post he held at the time of his recent promotion.

Norris P. Ballou, assistant to the president of the Railway Express Agency at New York, retired on June 1. Mr. Ballou was born at Denver, Colo., on May 25, 1879, and was educated in schools in the United States and France, receiving his Ph.B. degree from the Sheffield Scientific School of Yale University in 1904, and his LL.B. degree from New York Law School in 1907. He served as a sergeant with the Second United States Cavalry Volunteers in the Spanish-American War. Mr. Ballou was admitted to the New York Bar in 1907 and served as assistant to the chairman of the Association of Railway Executives from 1920 to 1930. He was associated with the negotiations by which in 1929 the railroads acquired the business of the American Railway Express Company (now Railway Express Agency) and served as assistant to the president from that year until his retirement.

George F. Potter, assistant to vice-president of the Atlantic Coast Line, has been appointed assistant vice-president, traffic department, with headquarters at Wilmington, N. C. Mr. Potter was born at Cincinnati, Ohio, on October 27, 1895 and attended local schools there. He entered railroad service with the Southern

George F. Potter

at Cincinnati in 1914, and joined the Atlantic Coast Line on August 1, 1935, as assistant to general freight agent at Wilmington. Mr. Potter was appointed assistant general freight agent on July 25, 1936; general freight agent on September 1, 1940; and assistant to vice-president on February 12, 1947.

James F. Ross, general manager of the New York City department of the Railway Express Agency, has been appointed assistant to president at New York. **Chester J. Jump,** assistant to vice-president, accounting, has been appointed assistant to president, with headquarters as before at New York.

Frank H. Daggett, general manager of the Bangor & Aroostook at Bangor, Me., has been appointed vice-president and general manager. **Henry J. Hart,** general counsel, has been appointed vice-president and general counsel.

Howard C. Greer, whose election as vice-president—finance of the Chicago, Indianapolis & Louisville was reported in *Railway Age* of May 21, is a certified public accountant and has been active in professional accounting organizations. In 1946 he became management consultant and a director of the Monon and, some months ago, he was appointed also budget director. Mr. Greer recently with-

Howard C. Greer

drew from an administrative position with Kingan & Co., a meat packing enterprise, to accept his enlarged responsibilities as vice-president—finance of the Monon. In his new post he will have charge of advisory service to the management and the board on budgetary and financial problems.

Glen H. Reno has been appointed assistant to vice-president of the Washington & Old Dominion at Arlington, Va.

P. N. Myers, vice-president of the McCloud River at McCloud, Cal., has been elected president, re-elected treasurer, and reappointed general manager at that point. **J. C. Orlowski,** secretary, traffic manager and assistant treasurer, has been elected also vice-president to succeed Mr. Myers.

Harold J. Hoglund, who has served since 1946 as carrier member, First division, National Railroad Adjustment Board, has returned to the Chicago, Burlington & Quincy as assistant vice-president, at Chicago. Prior to his furlough for service with the adjustment board, Mr. Hoglund was assistant to executive vice-president of the Burlington.

FINANCIAL, LEGAL & ACCOUNTING

Joseph D. Haggerty, general statistician of the New York Central, has been appointed to the newly-created position of assistant comptroller in charge of statistics and **Frederic D. Martin,** tax accountant in the comptroller's office, has been appointed to the newly-created position of assistant comptroller in charge of taxes, both with headquarters at New York. Mr. Haggerty was born at Poughkeepsie, N. Y., in 1893, and began his

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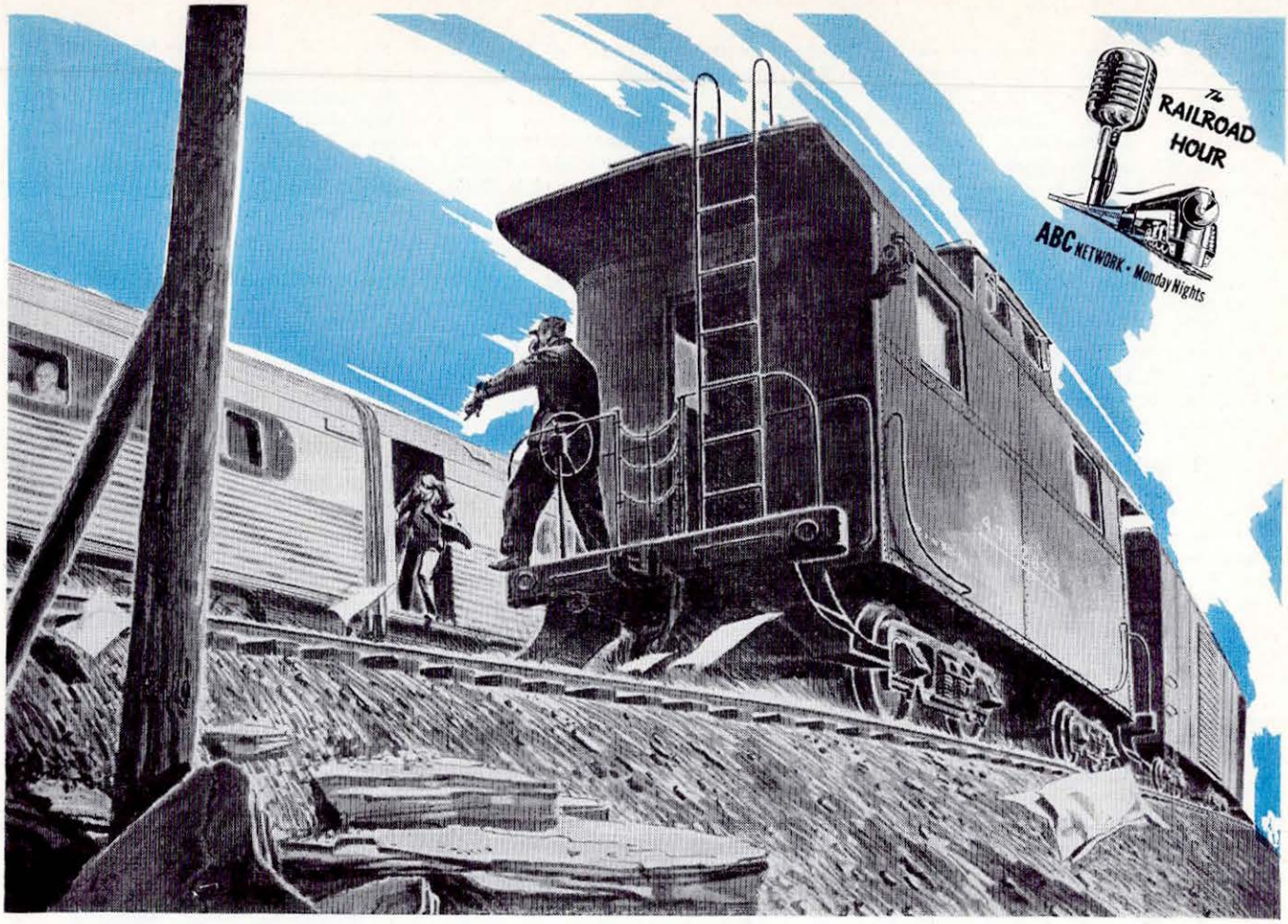
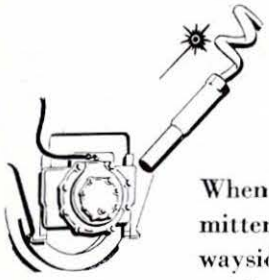


there's a BETTER SIMPLER way today of spotting bearing trouble!



When passenger trains rely on intermittent, "one-sided," inspection by wayside stations and the crews of passing trains to spot bearing trouble—the warning often comes too late! Permanent damage is done before the trouble is detected.

The Westinghouse-Union Hot Bearing Detector provides a better, safer, *modern* way. At the first hint of abnormal temperature rise in any bearing, a red light in the affected car signals the train crew . . . and a signal whistle in the cab warns the enginemen.

Temperature fluctuations due to weather or normal operating conditions are disregarded. Only the excessive rise in an individual bearing is reported.

Principles and details of operation are digested in leaflet No. 2464. May we send you a copy?

Westinghouse Air Brake Co.

WILMERDING, PA.

Brakes are Basic to Railroad Progress

P-4406

railroad service as a chainman in the engineering department of the New York Central at Poughkeepsie in 1913. In 1918 he became an instrumentman in the engineering department at New York, and in 1929 he was appointed traveling accountant for the comptroller. He became a statistician in the comptroller's office in 1942 and was appointed general statistician in 1945.

Mr. Martin was born at Indianapolis, Ind., in 1896, and entered the service of the New York Central in 1936 as accountant, after serving as auditor for the Indianapolis Union Railway. On March 1, 1939, Mr. Martin was appointed tax accountant in the comptroller's office.

M. E. Keehan, freight claim agent of the Chicago Great Western at Chicago, has retired after more than 39 years of service. **G. N. Reilly,** general claim agent at Chicago, has assumed jurisdiction over the freight claim department, in addition to his other duties.

W. E. Grossen, general auditor of the McCloud River at McCloud, Cal., has been appointed also assistant secretary at that point.

OPERATING

W. J. Price, whose promotion to superintendent of the Canadian Pacific at Brandon, Man., was reported in *Railway Age* of June 4, is a native of Hampton, N. B., and entered railroad service on the Manitoba district of the C. P. in 1909 as a brakeman, with headquarters

W. J. Price

at Minnedosa, Man. He became assistant superintendent at Kenora, Ont., in 1944, and subsequently served at Souris, Man., Winnipeg, Fort William, Ont., Brandon and Minnedosa. Mr. Price was transferred to the Moose Jaw (Sask.) division as assistant superintendent in 1946, the post he held at the time of his recent promotion.

Samuel D. Stainton, general manager of the Northeastern department of the Railway Express Agency, at Boston, Mass., has been transferred to the New York City department, succeeding **James F. Ross,** who has been named assistant to president.

W. E. Kingston, whose retirement as superintendent of the Canadian Pacific at Brandon, Man., was reported in *Railway Age* of June 4, is a native of Mount Forest, Ont., and began his railroad career with the C. P. in 1902 at Winnipeg, Man. He subsequently served as chief clerk to the general manager at Winnipeg and also held the position of chief clerk to the general superintendent at Calgary, Alta., and Vancouver, B. C. He has served at Wilkie, Sask., Moose Jaw and Kenora, Ont., becoming superintendent on the Portage division, with headquarters at Winnipeg, in 1929. Mr. Kingston was transferred in 1933 to the Brandon division, remaining there until his retirement.

Edward H. Buelow, trainmaster of the Illinois Central at Jackson, Tenn., has been promoted to superintendent of the Memphis division, with headquarters at Memphis, Tenn., succeeding the late **O. H. McFarlin.**

W. J. Barnes, trainmaster of the New York Central at Syracuse, N. Y., has been appointed assistant to general manager, with the same headquarters. **J. H Barry,** trainmaster at Utica, N. Y., has been transferred to the Syracuse division, to succeed Mr. Barnes. **F. K. Mitchell, Jr.** has been appointed trainmaster of the Pennsylvania division at Jersey Shore, Pa.

TRAFFIC

E. R. Dalrymple, division freight agent of the Canadian National at Ottawa, Ont., has been transferred to Montreal, Que., succeeding **S. E. Leger,** who has retired after 40 years of service with the company.

George G. MacCarthy, traveling passenger agent of the Chicago, St. Paul, Minneapolis & Omaha, with headquarters at St. Paul, Minn., has been appointed assistant to general passenger agent at that point.

The St. Louis-San Francisco and its subsidiary, the Alabama, Tennessee & Northern, have opened a joint traffic office at 106 St. Joseph street, Mobile, Ala., under the supervision of **J. C. O'Neil',** traffic manager of the Frisco at Mobile and vice-president—traffic of the A. T. & N.

B. D. Rhodes, general western freight agent of the Pennsylvania at Chicago, has been appointed to the newly created position of Pacific Coast freight traffic manager at San Francisco, Cal., with jurisdiction over the road's freight traffic activities in California, Oregon, Washington, Montana, Idaho, Nevada, Arizona and New Mexico. **A. S. Jennings,** western freight traffic manager at Chicago, continues in charge of the Mid-West and Rocky Mountain area, excepting those states assigned to Mr. Rhodes, and **E. W. Fisher,** southwestern freight traffic manager at St. Louis, Mo., retains supervision of the Mid-South and Southwest territory, excepting the states of Arizona and New Mexico.

W. C. Sutton, general agent of the Chicago, Rock Island & Pacific at Denver, Colo., has been transferred to St. Louis Mo.

E. A. Klippel, assistant passenger traffic manager of the Union Pacific at Omaha, Neb., has been appointed to the newly-created post of passenger traffic manager at that point. Mr. Klippel, who is a native of Portland, Ore., entered U. P. service as a ticket clerk at La Grande, Ore., in 1917, and became traveling passenger agent at Spokane, Wash., in 1920.

E. A. Klippel

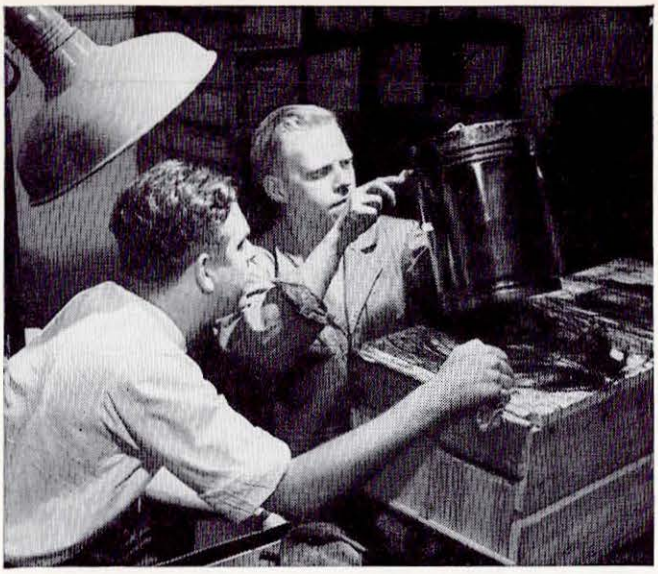
He was promoted to general agent at Portland in 1926, and was appointed assistant general passenger agent at Salt Lake City, Utah, in 1932. Two years later he was transferred in the same capacity to Omaha, and was advanced to general passenger agent there in 1940. Mr. Klippel became assistant traffic manager in 1945, and continued to serve in that position until his recent appointment.

Raymond E. Bisha, industrial agent of the Louisville & Nashville, at Louisville, Ky., has been appointed to the newly-created position of general industrial agent at that point, with system-wide jurisdiction over industrial development activities of the L. & N.

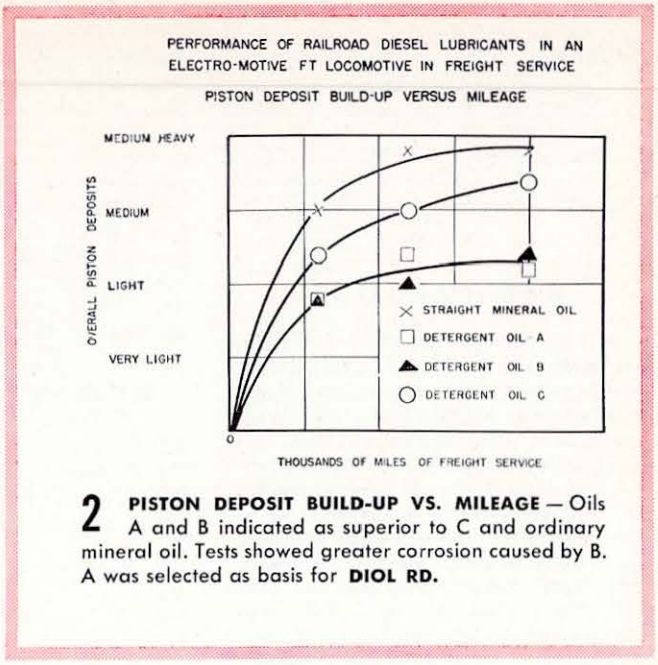
PURCHASES and STORES

Edward W. Gatzert, whose appointment as assistant purchasing agent of the St. Louis-San Francisco at St. Louis, Mo., was reported in the *Railway Age* of May 28, was born at Waterloo, Ill., on January 29, 1896, and was educated in St. Louis, where he attended the public schools and business college. He entered railroad service with the Frisco on July

News Department continued on next left-hand page



1 **EARL W. BALL,** Esso sales dept. lubrication engineer, watches **DR. LEONARD E. MOODY,** Standard Oil Development Co. research chemist, rate piston and rings for carbon and varnish deposits.



2 **PISTON DEPOSIT BUILD-UP VS. MILEAGE** — Oils A and B indicated as superior to C and ordinary mineral oil. Tests showed greater corrosion caused by B. A was selected as basis for **DIOL RD.**

Diol RD ...Great New Diesel Locomotive Lubricating Oil Developed in Largest Controlled Lubricant Field Test Ever Conducted!

A THREE-YEAR TEST—the most comprehensive ever conducted on diesel locomotive lubricating oils—has been completed by Esso.

ESSO'S LABORATORY ON WHEELS was a two-unit Electro-Motive locomotive equipped with V-type, 1,350 hp., 800 r p.m., 16 cylinder, 8½ x 10 in. diesel engines. A complete set of testing instruments, including specially devised equipment, was installed and the locomotive was put into service on the N. Y., O. and W.

AT THE END OF THE TEST locomotive #601 had gone over a half million miles under varying conditions of load, speed and temperatures. A vast amount of important information and "know-how" on diesel operation had been accumulated . . . and a superior new lubricating oil had been developed. The oil, now named **DIOL RD,** is available in two grades: **74** and **76. DIOL RD** contains a special additive that *reduces engine deposits, inhibits corrosion, fights oxidation, is not lost in service.*

FOR FURTHER INFORMATION on DIOL RD 74 and 76 and this unprecedented 3-year test, contact Esso Railroad Sales Division, Esso Standard Oil Co., 15 West 51st St., New York 19, N. Y., today!

3 **N. Y., ONTARIO & WESTERN LOCOMOTIVE #601** as it was being equipped with testing instruments for Esso's 3-year, half-million mile controlled field test of diesel lubricants.

The Sign of QUALITY — Esso — The Symbol of SERVICE

RAILROAD PRODUCTS

SOLD IN: Maine, N. H., Vt., Mass., Conn., R. I., N. Y., Penna., N. J., Del., Md., D. C., Va., W. Va., N. C., S. C., Tenn., Ark., La.

ESSO STANDARD OIL COMPANY—Boston, Mass.—New York, N. Y.—Elizabeth, N. J.—Baltimore, Md.—Richmond, Va.—Charleston, W. Va.—Charlotte, N. C.—Columbia, S. C.—Memphis, Tenn.—Little Rock, Ark.—New Orleans, La.

ESSO STANDARD OIL COMPANY OF PENNSYLVANIA—Philadelphia, Pa.

3, 1912, as office boy in the purchasing department, and subsequently held various clerical positions in the same department until his promotion to chief clerk in 1924. Except for military service during World War I, Mr. Gatzert has served continuously for 37 years in the Frisco's purchasing department at St. Louis.

MECHANICAL

W. A. Newman, manager of the department of research of the Canadian Pacific, has been appointed also chief of motive power and rolling stock, with headquarters as before at Montreal, Que., succeeding **H. B. Bowen,** who retired on pension on May 31 after 44 years of service. **F. V. Stone,** assistant to the manager of the department of research, has been promoted to assistant manager of the department. Mr. Newman was born on June 29, 1889, at Hamilton, Ont., and educated at Queen's University, Kingston, Ont., graduating in 1911 with a B.Sc. degree. He joined the Canadian Pacific in 1911 as special apprentice and during 1914 and 1915 he was assistant professor of mechanical engineering at Queen's University. From 1916 to 1940 Mr. Newman served successively as engineer of locomotive and car construction; mechanical engineer, and chief mechanical engineer of the Canadian Pacific at Montreal. From 1940 to 1945, he was on leave with the government of the Dominion of Canada as president and general manager of the Federal Aircraft Ltd., and as aircraft controller and aviation administrator for the Wartime Prices and Trade Board. Mr. Newman has been manager of the Canadian Pacific's department of research since its formation in 1945.

W. A. Newman

Mr. Bowen was born in Derbyshire, England, on May 17, 1884, and was educated in railway machine work at the Manchester School of Technology. He entered the service of the Canadian Pacific in 1905 in the Angus shops at Montreal, and the following year he went to Winnipeg, Man., where he served successively as draftsman, foreman wheel and tender shop, shop engineer, chief draftsman, works manager, and assistant superintendent motive power of the Western lines. In August, 1928, Mr. Bowen returned to Montreal as chief of motive power and rolling stock, which position he held until his retirement.

Mr. Stone received his M.A. degree from McGill University in 1933 and joined the Canadian Pacific in 1938. He has been with the department of research since 1945, serving as assistant to the manager for the past two years.

ENGINEERING & SIGNALING

B. H. Prater, engineering consultant of the Union Pacific at Omaha, Neb., has retired after 43 years of service.

B. F. McGowan, assistant signal engineer of the Minneapolis, St. Paul & Sault Ste. Marie at Minneapolis, Minn., has been promoted to superintendent of signals at that point, succeeding **J. R. Smith,** who has retired after more than 39 years of service. **F. C. Bloch** and **C. R. Holmberg** have been appointed assistant superintendents of signals, also at Minneapolis.

Guy Prescott Palmer, regional engineer, construction and maintenance, Baltimore & Ohio Chicago Terminal, with headquarters at Chicago, will retire from railroad service June 15, after 47 years of service with the B.&O. Mr. Palmer was born on March 29, 1883, at Winchester, Mass., and received his higher education at the Massachusetts Institute of Technology, from which he was graduated in 1904. He entered railroad service with the Baltimore & Ohio on June 10, 1902, while on vacation from school, as assistant in the engineering corps, and served in the same capacity the following summer. Following graduation, on February 25, 1905, he returned to the B.&O. in its engineering corps at Chicago, and on April 1, 1910, entered the service of the B.&O.C.T. as assistant engineer, the B.&O. having just taken over control of that property. On March 1, 1911, Mr. Palmer became division engineer of the B.&O.C.T.; on September 1, 1918, he was appointed engineer, maintenance and construction; and on July 1, 1945, he was further advanced to regional engineer, construction and maintenance.

Guy Prescott Palmer

SPECIAL

James F. Blair, whose election as general manager of the Association of Western Railways at Chicago, was reported in the *Railway Age* of June 4, was born in that city on June 9, 1895, and was graduated recently from the University of Chicago's "Executive Program." He was employed by the Wells Fargo Express Company for a short time prior to entering service with the Chicago, Burlington & Quincy in December, 1913, in the office of the auditor of ticket accounts. From 1923 to 1928 he served successively as station traveling auditor at Sheridan, Wyo., Alliance, Neb., Beatrice and Beardstown, Ill., and subsequently held the position of chief clerk to auditor of freight accounts at Chicago. In February, 1936, he became assistant auditor of freight accounts at Chicago, and the following November was advanced to auditor of freight accounts. Mr. Blair served as auditor of expenditures at Chicago from 1938 to 1946, when he was appointed assistant general auditor, the post he held at the time of his election as general manager, Association of Western Railways.

OBITUARY

O. H. McFarlin, superintendent of the Memphis division of the Illinois Central at Memphis, Tenn., died recently.

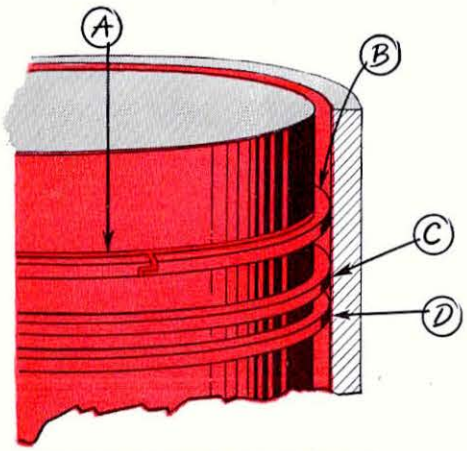
C. R. Swenson, signal engineer of the Chicago, Rock Island & Pacific at Chicago, died of a heart attack at his home in that city on June 7.

Fred M. Steele, late assistant vice-president of the Fort Dodge, Des Moines & Southern at Boone, Iowa, whose death was reported in *Railway Age* of May 28, was born at Mexico, Mo., on May 14 1878, where he began his railroad career in 1896, as assistant agent on the Chicago & Alton (now part of the Gulf, Mobile & Ohio). After serving as disposition clerk of the C. & A., he left that road in 1911 to join the Chicago Great Western as assistant cashier at Kansas City, Mo. He held various positions with the Great Western until 1912, when he entered Ft. D. D. M. & S. service as general agent at Des Moines, Iowa, being subsequently advanced through the positions of assistant general freight agent at Chicago, freight claim agent, assistant general freight agent and general freight agent at Boone. In 1929 Mr. Steele became general freight and passenger agent, and in 1934 was promoted to traffic manager. He was appointed assistant vice-president in June, 1948.

Table of Operating Revenues and Expenses appears on page 72

STANDARD ENGINEER'S CASE FILE

Case D119A—Maintaining Full Power in Diesel Engines



SECTION OF DIESEL ENGINE PISTON

Operators of Diesels in all types of service report RPM DELO Diesel Engine Lubricating Oil materially reduces power loss in three ways:

A. Detergent compounds prevent ring-sticking, allow full ring tension against cylinder wall, and this minimizes compression loss.

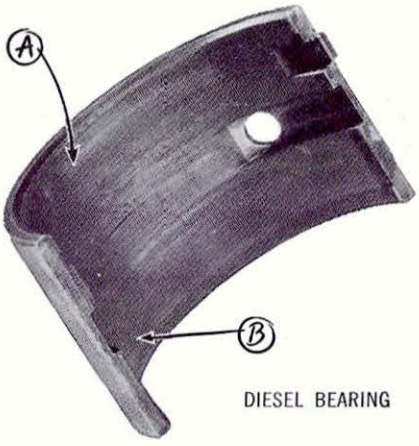
B. Metal-adhesion additive keeps full oil film on hot upper cylinder walls. These danger areas are often left unprotected by many oils.

C. RPM DELO Oil maintains a tough oil seal that stops blow-by of combustion gases.

D. An anti-oxidant increases the inherent stability of RPM DELO Oil's selected base stocks and resists lacquer formations on liners and piston skirts.

Other additives in this pioneer compounded oil prevent foaming, and control gum formations.

Case D119B—Preventing Frequent Bearing Replacement Due to Corrosion



DIESEL BEARING

In normal operation, Diesel engines require excess oxygen and operate at high temperatures. Under these conditions many unstable lubricants tend to turn corrosive and attack the lead in the copper-lead structure of alloy bearings. RPM DELO Diesel Engine Lubricating Oil is especially compounded to prevent this cause of bearing failure.

A. Selected base stocks are used that are naturally resistant to oxidation, the cause of most bearing corrosion.

B. Anti-oxidation compounds in RPM DELO Oil further reduce the danger of corrosion.

In laboratory corrosion tests, copper-lead bearing strips immersed in RPM DELO Diesel Engine Lubricating Oil showed considerably less weight loss than those protected by similar type oils.

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OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS

Compiled from 128 monthly reports of revenues and expenses representing 132 Class I steam railways.

(Switching and Terminal Companies Not Included)

FOR THE MONTH OF MARCH 1949 AND 1948

Item	United States		Eastern District		Southern District		Western District	
	1949	1948	1949	1948	1949	1948	1949	1948
Miles of road operated at close of month	226,670	227,216	53,489	53,699	46,044	46,162	127,137	127,355
Revenues:								
Freight	$616,073,670	$642,346,168	$229,299,005	$250,501,958	$124,069,602	$131,508,863	$262,705,063	$260,335,347
Passenger	67,608,046	74,398,462	34,845,391	37,150,079	12,275,517	13,243,368	20,487,138	24,005,015
Mail	18,949,273	15,530,463	6,890,340	5,455,553	3,502,516	2,805,369	8,556,417	7,269,541
Express	6,378,815	12,822,927	1,852,942	5,086,043	1,359,804	2,257,184	3,166,069	5,479,700
All other operating revenues	30,048,311	31,518,089	13,381,109	14,048,192	5,310,807	5,435,986	11,356,395	12,033,911
Railway operating revenues	739,053,115	776,616,109	286,268,787	312,241,825	146,518,246	155,250 770	306,271,082	309,123,514
Expenses:								
Maintenance of way and structures	103,347,667	104,816,404	37,026,718	37,312,837	21,753,743	23,098,261	44,567,206	44,405,306
Depreciation	10,531,305	10,310,332	4,443,750	4,378,642	1,855,910	1,789,942	4,281,645	4,141,748
Retirements	891,280	622,613	351,023	128,988	122,495	102,317	417,762	391,308
Deferred maintenance	*305,075	*380,793	*136,361	*22,229	*45,490	*163,971	*123,224	*194,593
Amortization of defense projects	135,526	141,991	14,680	11,953	49,266	41,870	71,580	88,168
Equalization	3,744,567	1,369,190	2,981,919	1,521,814	305,797	*881,513	456,851	728,889
All other	88,300,064	92,753,071	29,371,707	31,293,669	19,465,765	22,209,616	39,462,592	39,249,786
Maintenance of equipment	136,690,964	143,176,041	54,196,285	61,047,916	27,202,711	28,861,719	55,291,968	53,266,406
Depreciation	22,530,690	20,161,118	8,664,414	7,911,480	5,035,116	4,478,654	8,831,160	7,770,984
Retirements	*64,070	*71,088	*12,280	*27,431	*12,216	*17,674	*39,574	*25,983
Deferred maintenance and major repairs	*104,753	*414,619	*52,862	.....	*33,421	*88,777	*18,470	*325,842
Amortization of defense projects	1,222,049	1,227,814	450,984	452,345	238,873	240,126	532,192	535,343
Equalization	*99,376	501,630	*974	77,730	*94,071	336,891	*4,331	87,009
All other	113,206,424	121,771,186	45,147,003	52,633,792	22,068,430	23,912,499	45,999,991	45,224,895
Traffic	16,764,084	16,089,554	5,744,931	5,385,336	3,476,628	3,637,495	7,542,525	7,066,723
Transportation—Rail line	297 395,460	321,034,216	124,764,838	139,891,314	55,164,589	58,291,183	117,466,033	122,851,719
Miscellaneous operations	9,841,904	10,710,834	3,721,733	4,027,940	1,654,448	1,789,639	4,465,723	4,893,255
General	23,893,184	22,932,296	9,238,040	8,640,367	5,092,270	5,137,553	9,562,874	9,154,376
Railway operating expenses ‡	587,933,263	618,759,345	234,692,545	256,305,710	114,344,389	120,815,850	238,896,329	241,637,785
Net revenue from railway operations	151,124,852	157,856,764	51,576,242	55,936,115	32,173,857	34,434,920	67,374,753	67,485,729
Railway tax accruals	72,339,986	82,163,688	25,969,753	29,044 662	16,447,115	18,131,747	29,923,118	34,987,279
Pay-roll taxes	21,035,205	31,086,977	8,570,800	12,979,142	4,135,843	6,106,300	8,328,562	12,001,535
Federal income taxes†	24,356,269	26,104,974	7,231,838	6,686,810	6,708,033	6,809,262	10,416,398	12,608,960
All other taxes	26,948,512	24,971,737	10,167,115	9,378,710	5,603,239	5,216,185	11,178,158	10,376,842
Railway operating income	78,784,866	75,693,076	25,606,489	26,891,453	15,726,742	16,303,173	37,451,635	32,498,450
Equipment rents—Dr. balance	10,265,948	11,592,403	4,157,844	6,003,228	14,901	*417,963	6,093,203	6,007,138
Joint facility rent—Dr. balance	3,101,726	3,376,342	1,553,195	1,654,049	378,074	527,259	1,170,457	1,195,034
Net railway operating income	65,417,192	60,724,331	19,895,450	19,234,176	15,333,767	16,193,877	30,187,975	25,296,278
Ratio of expenses to revenue (percent)	79.6	79.7	82.0	82.1	78.0	77.8	78.0	78.2

FOR THE THREE MONTHS ENDED WITH MARCH 1949 AND 1948

Item	United States		Eastern District		Southern District		Western District	
	1949	1948	1949	1948	1949	1948	1949	1948
Miles of road operated at close of month	226,677	227,221	53,490	53,700	46,040	46,157	127,147	127,364
Revenues:								
Freight	$1,770,006,396	$1,845,601,151	$688,130,598	$709,646,253	$374,611,935	$394,969,272	$707,263,863	$740,985,626
Passenger	216,504,416	227,360,303	112,623,005	115,545,303	38,409,512	39,836 762	65,471,899	71,978,238
Mail	52,543,279	44,729,060	19,150,813	15,795,259	9,674,353	8,123,395	23,718,113	20,810,406
Express	15,474,963	30,040,587	4,146,822	8,695,905	3,384,651	6,074,266	7,943,490	15,270,416
All other operating revenues	90,964,714	95,510.437	40,372,413	42,278,802	15,909 899	16,730,773	34,682,402	36,500,862
Railway operating revenues	2,145,493,768	2,243,241,538	864,423,651	891,961,522	441,990,350	465,734,468	839,079,767	885,545,548
Expenses:								
Maintenance of way and structures	304,090,474	302,303,113	108,331,803	110,798,305	65,171,885	67,437,814	130,586,786	124,066,994
Depreciation	31,649,022	30,906,743	13,324,627	13,133,382	5,557,061	5,355,598	12,767,334	12,417,763
Retirements	2,431,074	1,565,834	579,159	340,502	238,666	234,977	1,613,249	990,355
Deferred maintenance	*575,854	*1,118,520	*139,831	*38,632	*131,277	*499,097	*304,746	*580,791
Amortization of defense projects	439,915	701,058	44,046	36,696	144,617	128,591	251,252	535,771
Equalization	14,710,918	11,815,681	7,372,694	5,380,209	3,782,906	2,984,912	3 555,318	3,450,560
All other	255,435,399	258,432,317	87,151,108	91,946,148	55,579,912	59,232,833	112,704,379	107,253,336
Maintenance of equipment	416,112,106	417,984,100	170,187,536	178,417,676	83,397,157	84,561,192	162,527,413	155,005,232
Depreciation	66,898,196	59,855,798	25,779,150	23,447,416	14,934,130	13,361,255	26,184,916	23,047,127
Retirements	*185,033	*399,057	*33,100	*34,432	*31,652	*88,992	*120,281	*275,633
Deferred maintenance and major repairs	*450,124	*1,244,155	*236,716	.....	*131,202	*277,033	*80,206	*967,122
Amortization of defense projects	3,666,355	3,722,627	1,352,958	1,355,821	716,668	717,715	1,596,729	1,649,088
Equalization	834,090	1,466,082	46,558	294,022	671,555	954,323	115,977	217,737
All other	345,348,622	354,582,808	143,280,686	153,354,849	67,237,658	69,893,924	134,830,278	131,334,035
Traffic	49,038,471	46,907,971	16,791,230	15,626,151	10,543,592	10,659,331	21,703,649	20,622,489
Transportation—Rail line	900,959,109	953,860,506	379,843,064	411,702,343	166,988,960	179,249,084	354,127,085	362,909,079
Miscellaneous operations	31,419,520	33,030,093	11,875,238	12,535,102	5,093,665	5,533,445	14,450,617	14,961,546
General	70,360,369	66,884,762	27,362,034	25,504,512	14,972,553	14,575,747	28,025,782	26,804,503
Railway operating expenses #	1,771,980,049	1,820,970,545	714,390,905	754,584,089	346,167,812	362,016,613	711,421,332	704,369,843
Net revenue from railway operations	373,513,719	422,270,993	150,032,746	137,377,433	95,822,538	103,717,855	127,658,435	181,175,705
Railway tax accruals	205,435,448	237,223,188	78,459,090	83,341,419	48,789,221	55,025,086	78,187,137	98,856,683
Pay-roll taxes	63,694,498	91,874,086	26,175,258	38,534,997	12,437,288	18,143,642	25,081,952	35,195,447
Federal income taxes†	61,763,052	71,337,602	22,146,168	17,364,056	19,583,015	21,154,900	20,033,869	32,818,646
All other taxes	79,977,898	74,011,500	30,137,664	27,442,366	16,768,918	15,726,544	33,071,316	30,842,590
Railway operating income	168,078,271	185,047,805	71,573,656	54,036,014	47,033,317	48,692,697	49,471,298	82,319,022
Equipment rents—Dr. balance	30,148,565	32,026,329	13,851,032	16,343,042	*1,163,884	*2,881,440	17,461,417	18,564,727
Joint facility rent—Dr. balance	9,513,820	10,374,896	4,456,065	4,920,325	1,467,534	1,575.060	3,590,221	3 879,511
Net railway operating income	128,415,886	142,646,580	53,266,559	32,772,647	46.729,667	49,999,149	28,419,660	59,874,784
Ratio of expenses to revenues (per cent)	82.6	81.2	82.6	84.6	78.3	77.7	84.8	79.5

†Includes income tax and surtax.
‡Includes $10,350,241 accrued in anticipation of major wage awards.
#Includes $38,717,167 accrued in anticipation of major wage awards.
*Decrease, deficit, or other reverse item.
Compiled by the Bureau of Transport Economics, Interstate Commerce Commission. Subject to revision.

Current Publications

PERIODICAL ARTICLE

The Central Railroad of New Jersey. The Coupler, April, 1949. Published by the Jersey Central Lines, Jersey City Terminal, Jersey City 2, N. J.

On April 23, 1949, the Jersey Central Lines were one hundred years old. Forerunners of the present company were in operation prior to 1849, but April 23, 1849, was the date the Jersey Central became the "Jersey Central" and that is the date the company has chosen to recognize as marking the birth of the railroad as it is known today. This brief, illustrated history outlines the development of the predecessor ferry and railroad companies, and the Jersey Central Lines since their inception as such.

TRADE PUBLICATIONS

Steam Generator Maintenance—Bulletin No. 2-203. 50 pages, illustrations. Published by the Vapor Heating Corporation, Chicago.

This book, covering maintenance instructions for Vapor-Clarkson steam generators, clearly describes the mechanical parts, control circuits and washout instructions, and gives other information to help railroad men who maintain steam generators of that type.

Stimsonite All-Plastic Reflectors on Railroads. 8 pages, illustrations. Published by the American Gas Accumulator Company, 1027 Newark ave., Elizabeth 3, N. J.

This bulletin shows in detail the savings being made by the use of Stimsonite all-plastic reflectors on railroads. Typical signs for railroad use are pictured and described.

Greenville Freight Cars. 64 pages, illustrations. Published by the Greenville Steel Car Company, Greenville, Pa. Complimentary copies available to design engineers, production executives, metallurgists and purchasing agents on request.

This booklet is a pictorial review of the history and manufacturing facilities of the Greenville Steel Car Company, a wholly owned subsidiary of the Pittsburgh Forgings Company, Coraopolis, Pa., and Jackson, Mich., with behind-the-scenes pictures of the building of locomotive tenders, standard freight cars, special-purpose cars and other transportation equipment. A special section also pictures and describes the background, facilities and variety of products of the parent firm, the Pittsburgh Forgings Company.

Finishes for Aluminum. 124 pages, illustrations. Published by Reynolds Metals Company, 2500 So. Third st., Louisville, Ky. Free to those requesting it on company letterhead.

This publication, a technical manual which furnishes basic information on the various processes for applying surface finishes to aluminum, as well as the characteristics of the finishes so produced, is a revision of the two-volume book with the same title published in 1946. In the new edition, the processes adapted to continuous production operations are definitely separated from the finishes only partially adapted to mass production techniques as well as those not yet fully established. The subject has been brought up to date and the old two-volume edition has been combined into a single convenient pocket-size reference book.

Diesel's the Power, Sheppard's the Diesel. 16 pages, illustrations. Published by R. H. Sheppard Company, Hanover, Pa.

A catalog describing the Sheppard line of Diesel power units, marine engines and generating sets. It includes pictures, applications and specifications of the various units described.

BOOK

Summary Tables of the Sixty-first Annual Report on the Statistics of Railways in the United States for the Year Ended December 31, 1947. 246 pages. Prepared by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission, Washington, D. C. Available from the Government Printing Office, Washington 25, D. C. $1.

Contains complete financial and operating statistics on the railroads of the United States, and includes selected data for the Pullman Company, Railway Express Agency, electric railways, carriers by water, oil pipe lines, motor carriers, freight forwarders and private car owners subject to the Interstate Commerce Act, for the year 1947.

PAMPHLETS

The Drive for a Controlled Economy via Pale Pink Pills. 23 pages. Published by the Chamber of Commerce of the United States. Available from the Economic Research Department, Chamber of Commerce, Washington 6, D. C. Single copies, 25¢; five copies, or more, 25 per cent discount.

This pamphlet is a report on the Spence Bill, H.R. 2756 (officially called the "Economic Stability Act of 1949"), which embodies proposed legislation for implementing the President's control program. It analyzes the decisions government would have to make, the impact on the individual, the impact upon business, and also the degree to which "corrective" measures must be identical with "control" measures. A digest of the complete text of the bill is found in the appendix of this report.

Jefferson Davis and the Rock Island Bridge, by Dwight L. Agnew. 14 pages. Reprinted from the January, 1949, issue of the Iowa Journal of History. Published by the State Historical Society of Iowa, Iowa City, Iowa.

This is another interesting little bit of railroad history of the 1850's that describes the political problems involved, and the part played by Jefferson Davis, then Secretary of War, in events leading up to the building across the Mississippi river of the bridge which used the island of Rock Island as a stepping stone from Illinois to Iowa.

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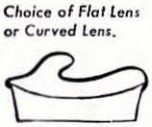

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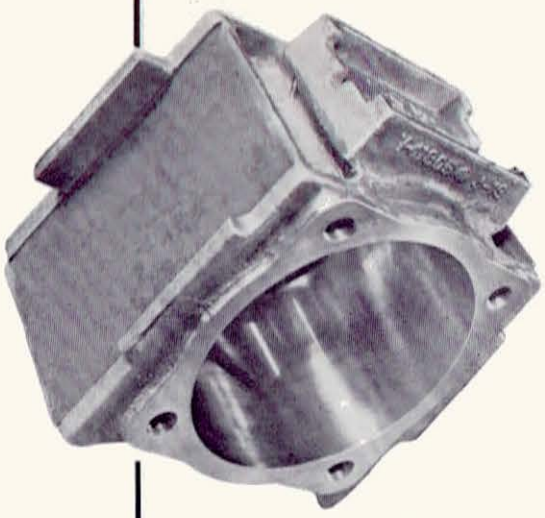

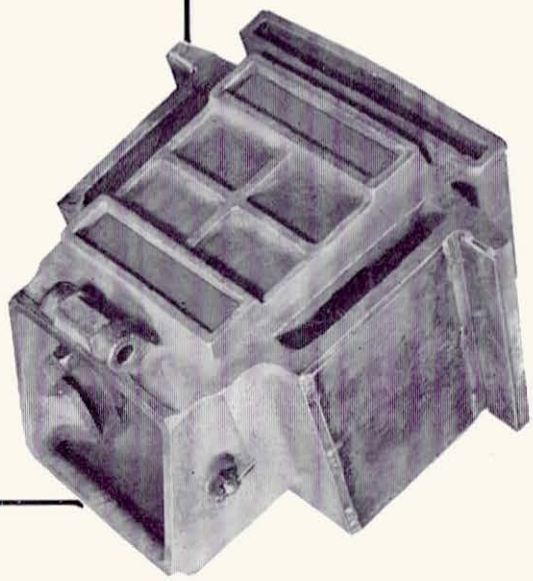

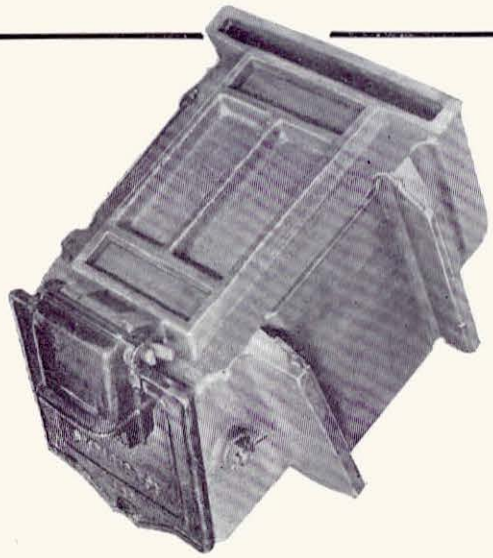

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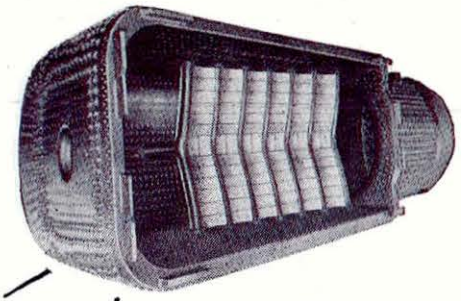

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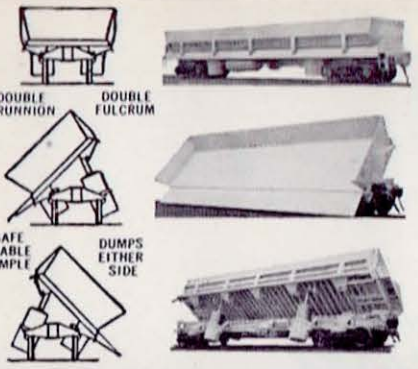

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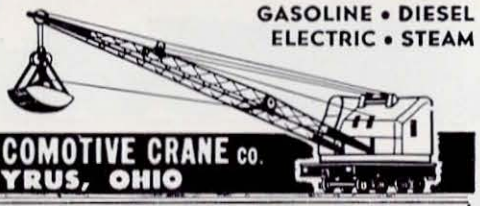

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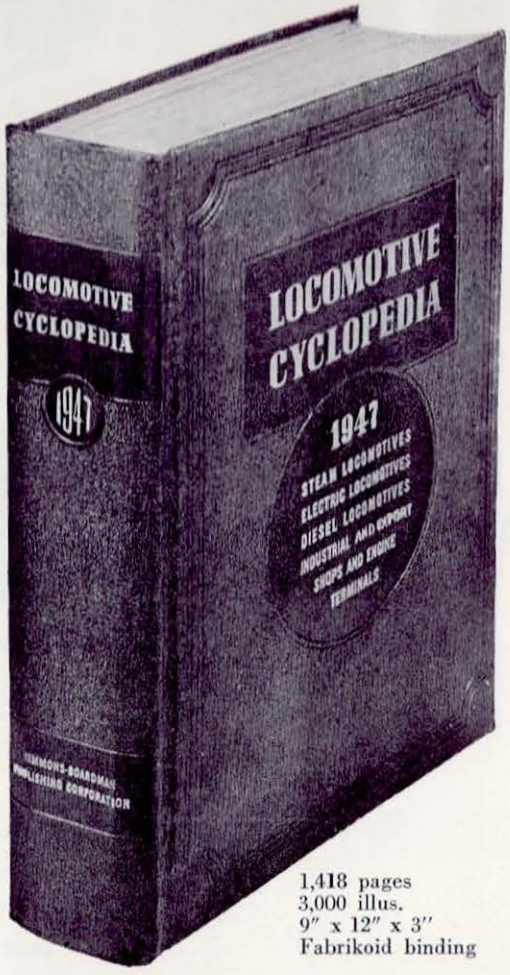

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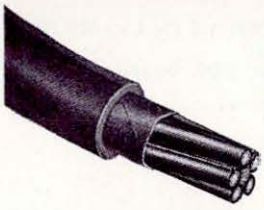

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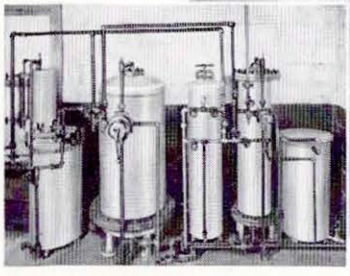

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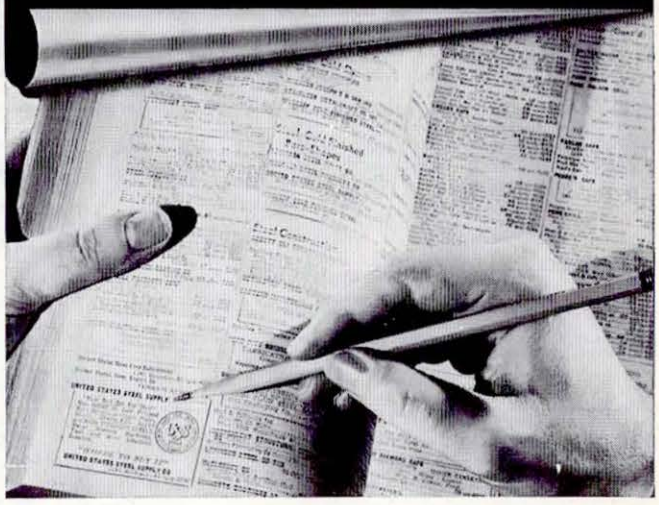

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Seymour: Seymour Kerite.

Doctor: Age?

Seymour: 95.

Doctor: Er, would you repeat that, please. For a second I thought you said 95, ha-ha.

Seymour: I did.

Doctor: Good gracious, you must be about ready to cash in your chips! Here, lie down while I take your blood pressure. Hmmmm. Ahem. Ahhh, yes. Remarkable!

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Doctor: Very unusual, yes, very. Old in experience, young in spirit. Hmmmm, interesting case.

Seymour: Your prognosis, doc?

Doctor: Mr. Kerite, this examination leads me to believe that you will stay young as long as the electrical industry needs cable insulation with long life and low cost per year.

Seymour: Those are my plans, doc!

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